DOCUMENT RESUME

ED 338 941 CG 023 752

AUTHOR Lee, Courtland
TITLE Achieving Diversity. Issues in the Recruitment and Retention of Underrepresented Racial/Ethnic Students in Higher Education: A Review of the Literature.
INSTITUTION National Association of College Admissions Counselors, Alexandria, VA.
PUB DATE 91
NOTE 39p.
AVAILABLE FROM National Association of College Admissions Counselors, 1800 Diagonal Road, Suite 430, Alexandria, VA 22314 ($12.50; quantity discounts).
PUB TYPE Information Analyses (070)

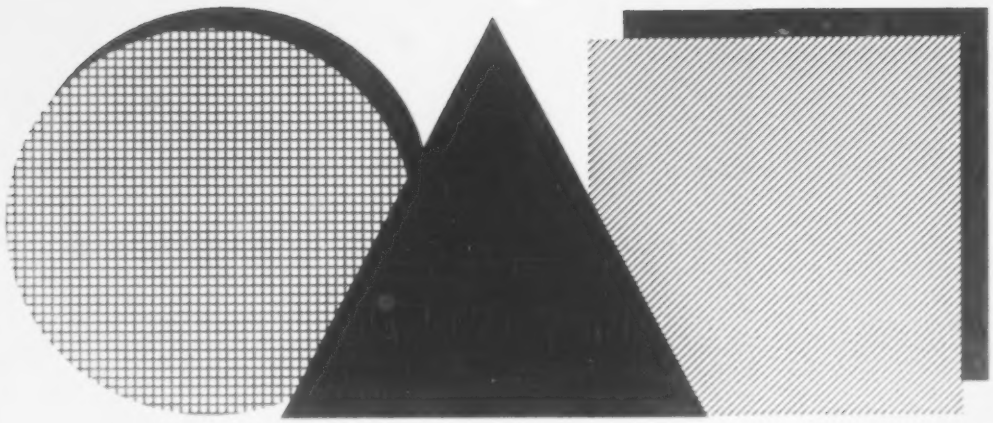
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Admissions Counseling; Admissions Officers; Affirmative Action; College Admission; Colleges; College Students; *Ethnic Groups; Higher Education; *Minority Groups; School Holding Power; *Selective Admission; Student Recruitment

ABSTRACT

Much has been done in recent years to enhance the quality of the educational experience for students from underrepresented racial/ethnic groups on college campuses. However, many major problems still exist, presenting professionals concerned with the educational development of students with many significant challenges. This literature review focuses on issues in the recruitment and retention of the following underrepresented racial/ethnic students in higher education: Native Americans, African Americans, Latino/Hispanic Americans, Asian Pacific Americans, and Undocumented Students. The review contains four chapters. The recruitment chapter focuses on issues related to the postsecondary transition process. The chapter on retention reviews the salient issues related to the college enrollment, retention, and graduation of students from these racial/ethnic groups. Before examining these two issues, the first two chapters discuss, respectively, enrollment and graduation trends for underrepresented racial/ethnic students, and the cultural dynamics that must be considered in recruitment and retention policies. The issues and research findings provided in this review stress the need for new policy directions that insure maximum participation in the higher education process for students from underrepresented groups. (LLL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED338941



Achieving Diversity

Issues in the Recruitment and Retention of Underrepresented Racial/Ethnic Students in Higher Education: A Review of the Literature

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

H. J. Pape

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Courtland Lee, Ph.D.
Director, Counselor Education Program
University of Virginia

CG023752

National Association of College Admission Counselors

BEST COPY AVAILABLE

NACAC Commission on Minority Participation in Higher Education

Sharon M. Alston, Chair &
NACAC Coordinator for Diversity Concerns
Associate Director of Admission
University of Maryland

Dr. Courtland Lee, Researcher
Director, Counselor Education Program
University of Virginia

Maj. Raymond M. Barrows
Chief of Minority Enrollment
U.S. Air Force Academy, CO

Mason W. Bonner
Director of Recruitment
Stillman College, AL

Dr. Georgia A. Booker
Guidance Counselor
Woodrow Wilson High School, DC

Gary M. Kelsey
Director of Minority Admission
& Community Affairs
Pennsylvania State University, PA

William J. Owens
Counselor
North High School, AZ

Dr. Segundo Perez
Associate Director of Admission
Jersey City State College, NJ

William S. Ponder
Assistant Director Undergraduate Admission
University of California–Riverside

Sterling Sakai
Director of School Relations
California State University–Hayward

Veronica Thomas
Public Relations Coordinator for Recruitment
The Ohio State Agricultural
and Technical Institute

Cheryl Vandenberg
Financial Aid Counselor
Oneida Tribe, WI

NACAC Staff Liaison
Joyce Smith
Associate Executive Director
National Association of College
Admission Counselors, VA

Copyright ©1991 by the National Association of College Admission Counselors
Printed in the United States of America

Copies of this publication may be ordered by sending
$12.50 ($10 each for 3 or more copies) to:
National Association of College Admission Counselors
1800 Diagonal Road, Suite 430
Alexandria, VA 22314

CONTENTS

Foreword vii

Introduction 1

Chapter 1:
Demographic Background 3

Chapter 2:
The Dynamics of Culture in College Recruitment and Retention 7

Chapter 3:
Recruitment Issues 11

Chapter 4:
Retention Issues 19

Conclusion 31

References 33

FOREWORD

In the late 1980s, NACAC was challenged by a group of concerned members to get involved in addressing the downward trend of minority participation in higher education. The task at hand was to identify barriers and to develop strategies that would empower our members to effect change. They called for the creation of a task force that would make recommendations to NACAC members to enhance their efforts to recruit, retain, and graduate underrepresented students of color.

Under the leadership of Veronica Thomas, Coordinator of Diversity Concerns, and Rosetta Gooden, Vice President for Human Relations, this group developed and advanced a proposal for the creation of the Commission on Minority Participation in Higher Education, which was approved by the NACAC Executive Board in 1990. Special thanks go to Gary Kelsey, Ronald Ancrum, Carol Cotman-Hogan, Randy Miller, and Walter Washington for their encouragement and contributions toward the creation of this commission.

The full commission, with appointed members, was first convened in January, 1991, under the leadership of Sharon Alston, NACAC Coordinator for Diversity Concerns and Associate Director of Admission at the University of Maryland.

Dr. Courtland Lee, Associate Professor and Chairperson of the Counselor Education Department at the University of Virginia, was selected to join the group to assist in developing an understanding of the role of school counselors and college admission counselors. Dr. Lee was commissioned to conduct a search of the literature to examine the assumptions we have about the status of minority participation in higher education and the role of counselors in the school-to-college transition of students of color. I am pleased to make this literature review and bibliography available to you as the first step toward accomplishing the ambitious agenda of the commission. The coming months will undoubtedly generate recommendations for action by counselors in the field and by the association. I look forward to their work.

Regina E. Manley

Regina Manley, NACAC President

INTRODUCTION

Achieving higher educational equity for underrepresented racial/ethnic groups in higher education is not a new issue. In the past several decades, colleges and universities in concert with federal and state governments have attempted to open the doors of higher education to an increasingly diverse student body. While equal access to higher education has been a desirable goal, the present and future must consist of insuring that students of all backgrounds have a supportive educational environment to realize their full potential.

Much has been done in recent years to enhance the quality of the educational experience for students from underrepresented racial/ethnic groups on college campuses. However, many major problems still exist, presenting professionals concerned with the educational development of students with many significant challenges.

This literature review focuses on issues in the recruitment and retention of underrepresented racial/ethnic students in higher education. These two issues are of growing concern to college admission counselors and other student services professionals. It is clear that the complexities associated with these issues confront professionals with major challenges. The issues and research findings provided in this review stress the need for new policy directions that insure maximum participation in the higher education process for students from underrepresented groups. It is hoped that college admission counselors, policy makers, researchers and others in the postsecondary education community will spend a significant amount of time discussing the information presented in this review and using it as a basis for reevaluating policies aimed at moving students from underrepresented status into the mainstream of postsecondary educational opportunity.

Student Groups of Interest

Issues related to the following underrepresented racial/ethnic student groups will be covered in this review: Native Americans, African Americans, Latino/Hispanic Americans, Asian Pacific Americans, and Undocumented Students. The focus on these groups is the result of a decision made by the Commission on Minority Participation in Higher Education of the National Association of College Admission Counselors. Significantly, much of the literature indicates that in the decades following the 1960s, colleges and universities adopted well-intentioned policies to enhance the educational development of students from these groups. However, the literature suggests that many of these institutions have failed, as students from underrepresented racial/ethnic groups experience significant challenges in obtaining a college degree.

Areas to be Covered

Two areas will be covered in this review. The first examines the general area of the recruitment of students from underrepresented racial/ethnic groups into college. This area will focus on issues related to the postsecondary transition process. The second area to be explored is retention. This area will review the salient issues related to the college enrollment, retention, and graduation of students from these racial/ethnic groups. Before examining these two issues however, enrollment and graduation trends for underrepresented racial/ethnic students will be reviewed. In addition, important cultural dynamics that must be considered in recruitment and retention will be examined.

1 DEMOGRAPHIC BACKGROUND

Enrollment and graduation trends reveal a more complex pattern of gains and slowdowns than gross statistics for the past several decades would indicate. Participation by students from underrepresented racial/ethnic groups in higher education, while dramatically improving during the 1960s and 1970s, declined during the 1980s. Although minority education has improved since the early 1970s, the gain in access and achievement has not been as large as is usually assumed.

Enrollment Trends for Underrepresented Racial/Ethnic Students: 1970– 2000

The number of underrepresented racial/ethnic students entering postsecondary education is affected by the size of the pool of qualified students and the rate at which they enroll in college. Therefore, it is important to examine both high school graduation patterns and trends in college enrollment.

High School Graduation Patterns

A review of high school graduation rates for the period 1968-1985 reveals that about 82 percent of the 18-24 year old population (the traditional college-age group) have completed four years of high school (U.S. Bureau of the Census, 1986). When these rates are broken down by race/ethnicity, the rate of high school completion for Whites increased from 1972 to 1985 by only 1 percent, while Black graduation patterns have shown a marked increased. In 1968, only 58 percent of Black 18-24 year olds had completed four years of high school. By 1985, that rate had risen to 75 percent (U. S. Bureau of the Census, 1986).

Among Latino/Hispanics, the 1985 high school completion rate was 62 percent. Latino/Hispanic rates actually declined from 1976-1980 but have risen significantly since then. (U.S. Bureau of the Census, 1986). American Indians are graduating from high school at a 60 percent rate which is up from their 1970 level of 51 percent (Fries, 1987).

However, students from minority groups continue to trail the national average in high school completion rates (Carter & Wilson, 1989). Factors which indicate that students are at risk of dropping out of school include family income of less than $15,000 and parents with no high school diploma, which are more prevalent among Black, Latino/Hispanic and American Indian students (U. S. Department of Education, 1990).

Enrollment Trends

From 1968 to 1984, the total number of students enrolled in colleges and universities increased from less than 5 million to more than 12 million. In 1984, 80 percent of those 12 million students were White, 17 percent were resident minorities, and 35 percent were non-resident aliens (Statistical Abstract of the U.S., 1986).

Total enrollment increased by 11 percent during the eight year period from 1976 to 1984, a considerably lower rate of increase than that experienced in the early 1970s (U. S. Department of Education, 1988). Total minority enrollment was up from 1.7 million students in 1976 to more than 2 million in 1984, a 22 percent increase. Institutions of higher education also enrolled significantly more nonresident aliens. In contrast, White enrollment, the single biggest component, increased by

only 8 percent. African American enrollment lagged behind that of other groups, rising only 3.6 percent during the period 1976-1984. Since 1980, Black enrollment has declined by more than 3 percent.

Minority group representation in higher education increased rapidly until the mid-1970s and has grown more gradually since that time. Latino/Hispanic representation has increased from 3.5 percent to 4.3 percent and Asian American enrollment from 1.8 percent to 3.1 percent. However, African American enrollment has decreased from a peak of 9.4 percent in 1976 to 8.8 percent in 1984.

Until recently, very little attention was paid to the status of Native Americans in higher education. Fries (1987) however, documented important trends related to Native American progress in higher education. She reported that since 1950, the Native American population has grown from 360,000 to 1.4 million in 1980 with 45 percent of this total living in the Southwestern United States. Between 1970 and 1980, the 18-24 year old Native American cohort more than doubled in size to 234,000. Native American enrollment in higher education peaked in 1982 and is predominately in two-year institutions.

Significantly in the period 1976-1984, minority representation is highest in two-year institutions where it makes up 21 percent of total enrollment, compared with more than 14 percent in four-year institutions. Two-year institutions appear to be especially important for Latino/Hispanic and Native American students.

A recent report by Schantz and Brown (1990) from the National Center for Education Statistics in the Department of Education, presented a broader view of enrollment trends for the period 1978 through 1988. Schantz and Brown reported that between 1978 and 1988, Latino/Hispanic enrollment in higher education increased by 63 percent, and Asian American enrollment increased approximately 111 percent. In comparison, White enrollment increased about 12 percent and African American enrollment increased about 7 percent. After 1978, the rate of change in higher education enrollment varied by racial/ethnic categories. For example, Latino/Hispanic enrollment increased as much as 16 percent biennially; Asian enrollment increased, on the average, over 16 percent biennially. Increases in African American and White enrollment, however, averaged less than 7 percent biennially. Although enrollment increased in the early 1980s, the college participation rates for 18-24 year-old African American and Latino/Hispanic students fluctuated, averaging 28 percent for African American students and about 30 percent for Latino/Hispanic students. In contrast, the college participation rates for White 18-24 year olds rose steadily throughout the 1980s, from about 33 percent in 1981 to about 39 percent in 1988. Significantly in 1988, 2-year institutions accounted for 37 percent of total enrollment but 46 percent of total minority enrollment.

Graduation Trends for Underrepresented Racial/Ethnic Students: 1970-2000

Freund (1991) compiled statistics on race/ethnicity trends in degrees conferred by institutions of higher education for the period 1978-79 through 1988-89 for the National Center for Education Statistics. He found that the percentage of bachelor's degrees conferred on African Americans steadily declined during this period from 6.6 percent to 5.7 percent. For Latino/Hispanic Americans the number of bachelors' degrees conferred rose steadily from 2.2 percent to 2.9 percent. For Native Americans the percentage remained at 0.4 percent for the reporting period. For nonresident aliens the percentage rose from 1.9 percent to 2.7 percent from 1978-79 to 1988-89. Significantly, the greatest increase in the number of bachelor's degrees awarded was among Asian Pacific Americans. During the reporting period the number of Asian Pacific students receiving bachelors' degrees rose from 1.7 percent to 3.8 percent.

Interestingly, while graduation data was not available until 1984-85, similar trends hold for two-year institutions. In 1984-85 the percentage of African Americans receiving an associate degree was 8.3 percent. By 1988-89 this percentage had decreased to 8 percent. Among Latino/Hispanic students, 4.5 percent received an associate degree in 1984-85, while the percentage rose to 4.7 percent in 1988-

89. Among Native Americans, the percentage rose slightly in the reporting period from 0.7 percent to 0.8 percent. The percentage of associate degrees awarded to nonresident aliens remained steady at 1.5 percent during the period. Again, Asian Pacific Americans recorded the greatest increase in associate degrees. The percentage of associate degrees awarded to students of Asian Pacific backgrounds rose from 2.3 percent to 2.9 percent during the period.

Implications in Demographics for Policy and Programming at Secondary and Postsecondary Level

Despite a relatively positive picture for enrollment in and graduation from American institutions higher education for students from underrepresented racial/ethnic groups, some disturbing trends remain. This is particularly evident in the enrollment and graduation data for African American students. While enrollment and graduate rates steadily climbed for other groups, the percentages fell for African Americans.

Such a mixed picture has important implications for admission policy and programming at both the secondary and postsecondary level. Importantly, a number of recent reports have analyzed enrollment and graduation data for underrepresented racial/ethnic groups and made policy recommendations concerning greater minority participation in higher education (Commission on Minority Participation in Education and American Life, 1988; National Governors' Association, 1990; National Task Force for Minority Achievement in Higher Education, 1990; State Higher Education Executive Officers, 1990; Richardson, 1991; Richardson and Skinner, 1991; Western Interstate Commission on Higher Education, 1989). Among the major recommendations in these reports is that special enrollment planning for students from underrepresented groups would be a useful focus. Such planning should include recruiting programs targeting students from these groups, increased secondary school/college collaboration to improve preparation in secondary schools, and a careful examination of admission standards.

2 The Dynamics Of Culture In College Recruitment And Retention

As institutions of higher education become more concerned with the social context of education, the cultural backgrounds of students must be considered in recruitment and retention policies. The aspirations that a student develops regarding postsecondary education are in part the result of the socialization received within his or her family. This family socialization process is in turn influenced by cultural dynamics. Cultural orientations are often cited as the reason for the success or failure of particular groups of students in the American postsecondary educational system.

Before examining cultural dynamics however, an important caveat must be issued. In discussing the concept of cultural orientations, there is the danger of assuming that all students from a specific racial/ethnic group are the same and that one set of recruitment and retention policies are universally applicable. Indeed even a cursory review of the retention and recruitment literature, would leave one with the impression that there is an all-encompassing reality for a particular racial/ethnic group and that all students from that group act, feel and think in a homogeneous fashion. Such an impression often leads to a monolithic perspective on the experiences of a specific group of students as well as stereotypical thinking in which individuals are indistinguishable from one another in terms of attitudes, values, and behaviors. Admission professionals with such a perspective run the risk of approaching students not as distinct human beings with individual experiences, but rather merely as cultural stereotypes.

Any discipline that would seek to affect the development of a group of people must take into account the dynamics that shape that development. Culturally responsive admission policies and practices must be predicated on an understanding of cultural dynamics and their crucial role in fostering optimal educational development for students from underrepresented racial/ethnic groups.

When culture is considered in terms of either race or ethnicity, a number of dynamics may need to be considered in developing recruitment and retention policies with students from underrepresented racial/ethnic groups. Implicit in these dynamics are the beliefs, social forms, and material traits that constitute distinct cultural realities.

Level of Ethnic Identity and Acculturation

Recruitment and retention policies and programming for students from underrepresented racial/ethnic groups may ultimately hinge upon an understanding of the concepts of ethnic identity and acculturation. An appreciation of these dynamics, and their influence on human development, is fundamental to culturally responsive recruitment and retention policies.

In broad terms, ethnic identity refers to an individual's sense of belonging to an ethnic group and the part of one's personality that is attributable to ethnic group membership (Rotherman & Phinney, 1987). Acculturation, within the context of American society, refers to the degree to which an individual identifies with the attitudes, lifestyles, and values of the predominant macroculture (Lee, 1991). For groups with non-European cultural origins, the development of ethnic identity has been conceptualized as an evolutionary stage process (Atkinson, Morten & Sue, 1979; Cross, 1971; Jackson, 1975; Sue & Sue, 1971). Generally, these stages can range from little or no identification with the macroculture (and complete identification with the racial/ethnic group of origin), to complete identification with the macroculture (and little identification with the group of origin). Importantly, an individual's level of ethnic identity or acculturation may be influenced by a variety of factors such

as age, length of residence in the United States, level of education, extent of experience with racism, and socioeconomic status (Lee, 1991).

Individual development is greatly influenced by the level of ethnic identity and acculturation among groups of people with non- European cultural origins. The manner in which members of these groups view themselves in relation to others in American society can shape attitudes, behaviors, and values. The dynamics of ethnic identity and acculturation, therefore, need to be important considerations for recruitment and retention policies. Admission professionals need to be sensitive to issues of ethnic identity and carefully explore the degree of cultural similarity or dissimilarity between students and postsecondary institutions. Analysis of ethnic identity or acculturation levels should guide the focus of college admission for students from underrepresented racial/ethnic groups. Understanding a student's level of ethnic identity and degree of acculturation should provide direction for the cultural appropriateness of specific recruitment and retention efforts.

Kinship Networks and Family Influences

Immediate and extended family kinship networks must be considered as primary sources for promoting normal development among many racial or ethnic groups. Within these networks can be found hierarchical structures and carefully defined age and/or gender roles that provide traditional methods for help in decision- making and formulating new ways of thinking, feeling, and behaving.

For example in the traditional Native American value system, an individual's family and community kinship network are placed before self (Richardson, 1981). Likewise, in the African traditions of African American people is the "kinship principle," summed up in the Ashanti saying, "I am because we are, and because we are therefore I am," the basis of family support and community support networks (Nobles, 1972).

Among Latino/Hispanic Americans the extended family structure that typically includes formalized kinship relations and loyalty to the family takes precedence over social institutions. Children learn early about unquestionable parental authority and family loyalty (Padilla, 1981).

Similarly, among Asian Pacific Americans a significant part of the traditional value system rests on the notion of filial piety. It refers to the obligations, respect, and duty that a person has to his poor parents. Child-rearing practices are focused on emphasizing the importance of family ties and obligations, not on helping individuals separate and become independent (Sue, 1990). College admission policy and practice for students from underrepresented racial/ethnic groups, therefore, must include an understanding of and appreciation for the role of kinship networks and family influence on development.

Sex Role Socialization

Sex role socialization may need to be an important dynamic to consider in admission policy and programming. Many racial or ethnic groups have developed different perceptions of the role of men and women. These differential gender perceptions can influence the expectations considered normal for development. Such expectations therefore, can account for fundamental differences in personality development for men and women.

When necessary, sex role socialization and its effects on development should be considered in admission policy and programming. Admission professionals may need to be aware of how gender-based differences in developmental expectations are manifested among the men and women of a particular racial or ethnic group. For example, among Latino/Hispanic students it may be important to understand the concepts of *machismo* and *marianismo* (Ruiz, 1981). In their true cultural sense, these two concepts can dictate the development of distinct male and female attitudes, values, and behaviors that may have important implications for the college recruitment and retention of Latino/Hispanic men and women.

Religious and Spiritual Influences

Admission policy and practice for students from underrepresented racial/ethnic groups may be enhanced if the influence of religion or spirituality is considered a crucial dynamic in the recruitment and retention process. For many racial or ethnic groups, there is often little distinction between religious and secular life. The philosophical tenets inherent in religious or spiritual beliefs influence all aspects of human development and interaction.

For example in the traditions of Native American culture, religion is the universe and mysticism is highly prized. These notions have a profound effect on the value system of many Native Americans (Richardson, 1981). Likewise, in most Asian Pacific cultures, both the teachings of Confucianism and Buddhism have played a major role in shaping cultural values. Specifically, family honor, filial piety, and a high regard for education and learning come out of the philosophical tenets of these two religions (Sue, 1990).

Immigration Experience

Many members of racial or ethnic groups are relatively recent arrivals to the United States. For these people, the immigration experience may be an important dynamic to consider in the admission process. Immigration in some instances, has been prompted by political upheaval in other parts of the world. Many recent immigrants arrive here as refugees, who have escaped repressive governments. In addition to cultural beliefs and practices, these people bring with them the trauma associated with forced separation from family and homeland. In other cases, recent immigrants have been lured here by the age-old promise of economic and social opportunity. Often, a major challenge for these people is reconciling the desire to maintain cultural customs from back home with the pressure to adopt major aspects of American culture.

Whatever the reason for immigration however, the experience of suddenly finding oneself a stranger in a new land can effect human development in ways that may need to be considered in recruitment and retention policies and programs. Admission professionals, therefore, should be aware of the possible influence immigration experiences have on the attitudinal orientations, behavioral repertoires, and value systems, especially among undocumented students.

Although this list of dynamics is by no means exhaustive, these are some of the more important influences on student development that admission officials may need to consider in promoting the issues of recruitment and retention for students from underrepresented racial/ethnic groups. These dynamics may not be important variables in the lives of **all** students from these groups, but if culturally responsive recruitment and retention efforts are to take place, they may need to be considered in the admission process.

3 Recruitment Issues

In recent years, colleges have made serious attempts to recruit students from underrepresented racial/ethnic groups. However, they have often used the same tactics and processes that they use to recruit majority group students. In many instances, these approaches have not worked.

While great strides have been made over the past twenty years to attract students from underrepresented groups to colleges and universities, greater efforts need to be made to improve the recruitment process. In attempting to improve their tactics and processes, college admission officials need to consider some important issues related to the recruitment of students from these groups. Future recruitment policy and programming for students from underrepresented racial/ethnic groups need to be developed with a focus on key areas including: 1) college decision-making processes; 2) college preparation programs and procedures; 3) college recruitment efforts; and 4) financial aid.

Student Decision-Making Processes Related to Pursuing Higher Education

The literature would suggest that the prospect of financial aid weighs heavily in the decision of students from underrepresented racial/ethnic groups to attend college. This is borne out by research by Helms and Willis (1975), Miller (1977), Jones (1979), and Cheatham (1982). Significantly, the Commission on the Higher Education of Minorities in 1982 recommended that greater emphasis be placed on financial aid in the recruitment of students from these groups. This recommendation was underscored by the National Commission on Student Financial Assistance (1983).

While financial aid appears to be the major factor in the choice to pursue higher education by minority students, research evidence also points to the following factors as being important in the decision-making process: geographic location, the strength of the tutoring, counseling, and social, academic, and cultural programming services available to minority students. Another very important decision-making factor suggested by research data is the number of minority group members in faculty, staff, and administrative positions (Miller, 1977; Commission on the Higher Education of Minorities, 1982).

Recently, Oteri and Manley (1990) conducted a survey of 784 minority group applicants to a major Northeastern university who were accepted but did not enroll. The researchers conclude that the students were very aware of recent racial incidents that had taken place on the campus and made college choice decisions based in part on that information.

College Preparation Programs and Procedures

A review of the literature on college preparation programs strongly suggests that one of the primary methods for increasing the number of students from underrepresented racial ethnic groups who apply to college is through early awareness of and focused preparation for postsecondary education. Educators must develop early outreach programs to prepare, motivate, and educate junior and senior high school students from underrepresented racial/ethnic groups to gain the academic qualifications necessary to pursue postsecondary education. Based on the need for mutual cooperation to achieve common goals, partnerships between public schools and colleges are being established throughout the country. In areas with successful partnerships, educational programs for students from underrepresented racial/ethnic groups are being enhanced; education itself is seen as a continuum from preschool through college and recognized as a joint responsibility of both institutions. In 1989

for example, in a report entitled *Certainty of Opportunity*, representatives from 30 education organizations at a National Association of Student Financial Aid Administrators/American Council on Education symposium on early awareness of postsecondary' education discussed a national agenda for early awareness programs (ACE, 1989). Early awareness programs are broadly based efforts to introduce students in the late elementary and early secondary grades to the increased opportunities available to high school graduates who enroll in a postsecondary education program. The report concluded that all intervention strategies aimed at promoting postsecondary opportunities to minority elementary and secondary students should be based on the following concepts: 1) all student groups have high aspirations and are capable of academic achievement, 2) minority students have talents and abilities that are inhibited and obscured by the structure and practices of the educational system, 3) instituting the necessary changes in the education system will take a significant expenditure and effort, and 4) schools must be assisted in providing necessary guidance through collaborative arrangements.

Within this context, there are numerous programs cited in the literature designed to prepare students from underrepresented racial/ethnic groups for college. Ascher (1983) for example, presented a research review which included an examination of special assistance programs to help minority students with nontraditional skills enter and complete college. Similarly, Cornett (1986) reported the results of a survey of college-school activities related to student preparation for college. Most of the programs reported on were for talented students. Programs that were less common were those aimed at minority students. However, those programs designed to increase minority student preparation and motivation for college focused on career counseling and orientation to college life, and college-school programs both within and outside of schools.

There are a number of specific programs found in the literature. The Fund for the Improvement of Postsecondary Education funded a program during the period 1983-1986 in several school divisions in Virginia. The program called Project Discovery was a community-based educational intervention program for minority elementary and secondary school students. The goal of the program was to make the college option conceivable and achievable for minority young people. Students in the program received personal attention and academic counseling. They also attended workshops on college campuses, that covered study skills, admission criteria, goal setting, financial aid, and choosing a college (Fund for the Improvement of Postsecondary Education, 1987).

A similar type of program was developed and reported on in California (Meacham & Bachman, 1988). In order to introduce information about California State University freshman admission requirements to high school students, an outreach program was developed in the university's feeder high schools, particularly those with large numbers of minority students. The program involved presenting a video about the university and a series of talks designed to motivate students to attend college and to inform them about which high school course they should take to qualify for admission. A number of students were also taken on a visit to the university campus.

In an early effort Chapppell and Baur (1971), report on a physics-oriented college motivation program for Mexican American high school students in Colorado. The objective of the program was to motivate capable Mexican American students to consider the possibility of attending college. The program, a 4-week summer session following completion of grade 10, was held at the University of Colorado and consisted of discussion groups, lectures and laboratories. A continuation of the program through 2 years following the summer session had 4 functions: to maintain contact with the students and their parents; to help students improve their grades by providing tutoring; to assist students in applying for college admission and financial aid; and to inform selected colleges about the program and the students who participated. It should be noted that, although this program was physics-oriented, there is no reason why it should not work in the framework of any other discipline or with any other minority group.

Strategies to recruit Latino/Hispanic students at three colleges are described by Provencio (1990). He suggests that recruitment efforts must consist of finding out what current students think so you'll know your strengths. He also recommends developing ongoing relationships with high schools with significant Latino/Hispanic populations and work with parents.

It is apparent from the literature that successful college preparation programs and procedures for students from underrepresented racial/ethnic groups should involve some type of college-school partnership. Key members of this partnership include university officials, secondary school teachers and counselors, and parents.

Special Focus: African American Males

Arguably the group that faces the greatest challenge in the quest for postsecondary education is the African American male. There is a growing concern around the country that African American males are under siege (Cordes, 1985; Gary, 1981; McGhee, 1984; Leavy, 1983). One easy-to-measure indicator is the alarming decrease in the number of African American men going to college (Gregg, 1989).

At a time when rapidly changing technology requires a skilled and well educated workforce, African American men are losing ground at a perilous rate. In many colleges, African American women often outnumber their men two to one. The situation calls for aggressive steps to be taken, not only by college administrators, but by society, parents and elementary and secondary school teachers (Gregg, 1989).

Significantly, work is under way to improve the educational development of African American males. Freiberg (1991) reports on proposals around the country to separate African American boys into schools or classes where the emphasis will be on raising their self-respect, promoting racial and cultural pride and overcoming obstacles to their educational success. A growing number of school systems have implemented or are considering segregated educational experience for African American boys. For example in Milwaukee, Wisconsin, an elementary and a middle school for African American males are scheduled to open in the Fall of 1991. In New York City, the Board of Education is planning to establish an experimental high school that would focus on overcoming the problems of African American and Latino/Hispanic male youths.

In Baltimore, Maryland African American male demonstration classes have already started in two elementary schools and one middle school. In Washington, D.C., Spencer Holland, a psychologist at Morgan State University helped organize Project 2000, which brings African American men into public schools to serve as mentors for young boys. According to Freiberg (1991) these proposals are very controversial and have provoked fierce debate among scholars and educators.

Importantly however, Wilson and Carter (1988) focus on the disappearance of African American males in *The Seventh Annual Status Report: Minorities in Higher Education*, and call for targeting college recruitment and retention efforts specifically at African American males. As models of recruitment aimed at students from underrepresented racial/ethnic groups continue to emerge, it will be important for admission officials to give special attention to the recruitment and retention of the African American male.

College Recruitment Efforts

Much has been written in recent years about how institutions of higher education can change their environment to accommodate more students from underrepresented racial/ethnic groups. A major change centers around efforts to recruit students from these groups to colleges and universities (Bailey & Hafner, 1978; Richardson, 1989; Richardson & Skinner, 1991). If minorities are to participate fully in education, colleges must take specific, concerted steps to recruit them. This is especially challenging given soaring tuition costs, changes in student financial assistance policies, discontinuance of many minority college outreach programs, expanding numbers of minority families below the poverty line, high rates of minority unemployment, decreased federal emphasis on affirmative action and the shift in social mood regarding equality as a national goal. These are among factors frequently cited by scholars when discussing declining minority enrollment that make recruiting students from underrepresented racial/ethnic groups a significant challenge (Dershowitz, 1986; Fiske, 1985, Malcolm, 1985; Oliver & Brown,1986; Oliver & Etcheverry, 1987).

A commitment to equal educational opportunity for every student however, must be enhanced through the successful recruitment of students from underrepresented racial/ethnic groups. The National Task Force for Minority Achievement in Higher Education (1990) points out that when colleges and universities recognize disparities in graduating minority students, they first attempt to increase minority enrollments by reducing barriers to college attendance. Part of this attempt may be to target recruitment efforts at high schools with large numbers of minority students.

In the last decade however, recruitment of minority students has become more challenging. Applegate and Henniger (1989) for example, suggest that many minority youth reject the assertion that success today requires a college degree and believe racial prejudice and violence on campuses create an inhospitable environment for students from underrepresented racial/ethnic groups. In addition, the military is drawing a large share of minority students by offering them training, further education and decent pay (Cox and Jobe, 1988). Significantly, in the era of affirmative action and the aftermath of decisions such as Bakke, colleges have had to closely examine recruitment efforts, including how their admission standards relate to initiatives aimed at attracting qualified students from underrepresented racial/ethnic groups (Astin, 1982; Bailey & Hafner, 1978; Cohen, 1978; Fuller & McNamara, 1978; Richardson & Skinner, 1991).

Significantly, there has been a renewed call for increasing efforts to recruit minority students to postsecondary education (Cheatham, 1982; Dorsey-Gaines & Lewis, 1987; Rhodes, 1987). A review of the literature reveals a number of successful initiatives and suggestions aimed at recruiting students from underrepresented racial/ethnic groups to colleges and universities (Carter & Wilson, 1989; Cheatham, 1982; College Entrance Examination Board, 1970; Copolla & Rivas, 1985; Dorsey-Gaines & Lewis, 1987; Dupre, 1979; Getzel, 1983; Halcon, 1989; Johnson, 1981; Krajewski & Simmons, 1988; Magner and Wilson, 1989; Manacker, 1972; Mossie, 1979; Nakanishi, 1986; State Higher Education Executive Officers, 1987; Travino-Martinez, Hastings, Conley & Acuna, 1984; Sabine, 1978; Warfield, 1985).

An examination of successful recruitment initiatives reveals several important points for admission officials to consider in aggressively seeking the enrollment of students from underrepresented racial/ethnic groups in colleges and universities. The literature suggests focused counseling and earlier, more aggressive recruiting activities are needed. Dorsey-Gaines and Lewis (1987) suggest that as colleges start addressing recruitment of students from underrepresented racial/ethnic groups, the following are required components of a successful program: 1) a strong commitment from the president, vice presidents, deans, and associate deans; 2) the admission department needs a commitment from faculty, counselors, secretaries, nonprofessional personnel, and personnel in all areas of the college community; 3) a commitment of college resources has to be given to the project; and 4) a number of achievable goals has to be set and computed.

In a similar vein, Oliver & Brown (1988), offer six interrelated principles designed to assist in the systematic planning of recruitment activities aimed at students from underrepresented racial/ethnic groups: Principle 1) Recruitment activities must involve the university's main populace. White administrators, faculty, students, and staff must assume visible and active roles in all aspects of the enterprise; Principle 2) Recruitment activities should not be disproportionately dependent nor solely based on active minority participation; Principle 3) Recruitment programs should be designed to develop and facilitate linkages within and between minorities' social networks; Principle 4) Minority recruitment programs should include diverse activities; Principle 5) Minority recruitment programs should include active service components; and Principle 6) Minority recruitment programs will not succeed unless retention activities are systematically planned as part of a comprehensive recruitment and retention program.

Oliver and Brown (1988) have also developed a framework for recruitment action. The proposed framework consists of four interdependent and interrelated phases. The developers present the framework as a general guide for making judgment and choices regarding minority recruitment projects.

Admission Criteria

It is important to point out that college recruitment efforts are closely linked to admission criteria. It has been strongly suggested that many of the problems of removing barriers to full participation in higher education are linked to traditional college selection criteria (especially standardized college admission test scores) that are inadequate indicators of the future academic performance of students from underrepresented racial/ethnic groups (Ashworth, 1980; Astin, 1979; Fallows, 1980; Goldman & Widawski, 1976; Grant & Singleton, 1982; Lowman & Spuck, 1975; Mann, 1989; Milton, 1976; Nisbet, Rubl & Schurr, 1982; Tracey & Sedlacek, 1984 & 1985; Williams, 1982.)

In recent years, writers and researchers have called for an expansion of the methods used to assess each student's potential for success in college admission decisions. In particular, it has been asserted that alternatives to the standardized test for admission must be found if students from underrepresented racial/ethnic groups are to gain equal access to higher education (Astin, 1979; Green & Farquhar, 1965; Zimmerman, Parks, Gray & Michael, 1977; National Task Force for Minority Achievement in Higher Education, 1990).

Within this context, several important alternatives to standardized testing as admission criteria have emerged. These criteria can be subsumed under the heading of noncognitive variables. Willingham (1982) for example, examined which personal qualities can best supplement academic measures to predict a student's success in college. Personal qualities of students included things such as background, interests, and accomplishments. In a detailed study undertaken in cooperation with nine colleges, Willingham concluded that while traditional academic predictors, school rank and test scores, were by far the best predictors of college performance, personal qualities of students played a role in predicting college success. The implication of the findings is that admission policies may need to be more broadly based. The results of this study lend credence to a suggestion by Grant and Singleton (1982) that alternative criteria to test scores could be students' personality traits.

Eddins (1982) used a set of nontraditional variables as predictors at an urban university with a group of specially admitted African American students. He found that the variable "on campus behavior" was a valid predicator of academic performance. This variable measures the completion of homework assignments, attendance and classroom behavior. Similarly, Nisbet, Ruble & Schurr (1982) found that those students who perceived themselves as having good examination-taking skills and who had a stronger need for closure and routine were the most likely to succeed academically.

Six motivational items from a survey of freshman at an historically Black college were investigated by Pratt (1980) as possible predictors in the undergraduate admission equation. It was found that the motivational scale added significantly to the prediction of admission for two consecutive freshman classes. Pratt interpreted the findings as indicating that the motivational scale had promise as a noncognitive predictor.

Undoubtedly, the seminal research on noncognitive predictors of academic success for students from underrepresented racial/ethnic groups has been conducted by Sedlacek and his colleagues. Sedlacek and Brooks (1976) and Sedlacek (1977) proposed a set of seven noncognitive variables based on research aimed at answering the broad question, "Are there certain unique minority experiences which can be measured and translated into useful predictors of success in postsecondary education?"

The nontraditional variables developed from research and practical experiences, sometimes referred to as noncognitive variables include: 1) Positive self-concept; 2) understands and deals with racism; 3) realistic self-appraisal; 4) prefers long-range goals to short term or immediate needs; 5) availability of a strong support person; 6) successful leadership experience; and 7) demonstrated community service. Tracey and Sedlacek (1984) studied these variables in the form of a noncognitive questionnaire (NCQ). The NCQ has proven to be a valid predictor of undergraduate student persistence, especially for African American students, over as long as five years (Tracey & Sedlacek, 1984, 1985 and 1986). Sedlacek (1989) in discussing the evidence for using noncognitive variables in decision making urges their use as an alternative predictor of success and retention for minority students.

The literature makes clear that for students from underrepresented racial/ethnic groups standardized admission tests can be barriers to entering college. Some would assert that using college entrance examinations as a primary criterion for college admission discriminates against students from such groups (Cole, 1987; New York State Department of Education, 1989). It is obvious that test biases and misuse must be eliminated and new forms for evaluating potential for college success be developed (Weiss, 1987).

Overall declining college enrollment among minority groups represents a serious challenge to institutions of higher education. Ways must be found to reverse this trend or students from underrepresented racial/ethnic groups will not develop their full potential nor will they become productive contributing members of society. Therefore it is incumbent upon officials in higher education to intensify recruiting efforts among underrepresented minority group members.

Financial Aid

Financial considerations are a dominant factor in determining access and success in higher education for students from underrepresented racial/ethnic groups (Astin, 1982). As was indicated earlier, financial aid is the major decision factor for many students from these groups (Commission on the Higher Education of Minorities, 1982; National Commission on Student Financial Assistance, 1983). Significantly, the decline in college participation rates for minority students in recent years is directly attributable to changes in financial aid patterns, rising college costs, and declining family income (American Association of State Colleges and Universities, 1985; Black Issues in Higher Education, 1988).

According to Stampen and Fenske (1988), evidence suggests that political initiatives of the 1960s and 1970s succeeded in increasing enrollment rates for minority groups in higher education. For example, Astin (1982), analyzing data compiled for the Commission on the Higher Education of Minorities, found that minority involvement in higher education increased sharply after federal student aid programs began. Preer (1981), summarizing studies based on federal data, found the same pattern. Green (1982) also concluded that federal efforts, including financial aid programs were responsible for much of the increased enrollment in public colleges since the mid-1960s.

Overall minority enrollment rates rose sharply following the War on Poverty initiatives. Most data sources also report large enrollment gains in the 1974-76 period (Preer, 1981).

However, in the late 1970s, minority enrollment rates plummeted to near mid-1960s levels. This decline roughly corresponds with the federal government's retreat from funding low- income students during the latter half of the 1970s. Despite the declining enrollment rates, minority enrollment between 1976 and 1984 continued to rise faster than White enrollment. Even as late as 1981 and 1983, minorities accounted for approximately one-third of all need-based aid recipients (Stampen 1983, 1985). However, by the 1980s, actions by the federal government severely reduced the amount of aid available to students - a major blow to minority students hoping to attend college (Hawkins, 1989). Ostar (1986) indicted the Reagan administration for reductions in student aid that struck hard at minority enrollment in college.

It is apparent therefore that minority enrollments increase when student financial aid increases and is reinforced by broad- based political mandates, but declines when public attention turns to other issues. Astin (1982), Preer (1981), and Green (1982), focusing mainly on the period when minority enrollment rates were increasing, support this interpretation by seeing financial aid as a major contributing factor. Studies by Hansen and Stampen (1987) and St. John and Noell (1989) indicate that declining investment in student financial aid corresponds with declining minority enrollment. Minority enrollment began to decline in the latter 1970s when loans superceded grants as the predominant form of student aid. Research by Astin (1975) suggests that debt discourages African Americans and perhaps other minorities from enrolling in college. Lee, Rotermund and Bertshman (1985) associate declining minority enrollment in the mid-1970s with the emergence of loans as the

predominant form of aid. Astin (1982) contends that loans are harmful to minority enrollment and retention. Astin's contention suggests that during the period from the mid-1960s through the mid-1970s, the era of increased student aid, grants were the most common type of aid. However, by the 1980s, the gains had turned to losses as student aid became less tailored to the needs of low-income students.

Stampen and Fenske (1988) in reviewing the research on the impact of financial aid on minority students point out that there is very little empirical evidence describing the relative magnitude of economic and noneconomic barriers to college attendance for students from underrepresented racial/ethnic groups. However, several studies have explored associations between student and/or other financial and noneconomic variables. These studies suggest that both factors influence minority students' decisions to enroll in a college.

For example, in a study estimating that financial aid increases the likelihood that an applicant will enroll by approximately 8.5 percent, Jackson (1985) cautions that a host of other economic and noneconomic variables can lessen or increase this estimate. In another study, Hansen (1982) concluded that financial aid during the 1970s did not alter the postsecondary enrollment rates of high school seniors.

Conversely, in a study analyzing the effects of the type of financial aid offers on enrollment decisions by minority college applicants from the classes of 1980 and 1982, St. John and Noell (1989) found that all types of aid had a positive influence on enrollment by minority students.

Stampen and Fenske (1988), also reviewed the literature on the effects of financial aid on minority student persistence in higher education. Two studies, Astin (1975) and Astin and Cross (1979) found that grants and work-study awards produced higher persistence rates than loans for minority students. Financial aid was also found to have an important effect on minority student persistence in three other studies as well (Iwai and Churchill, 1982; Jensen, 1891; Terkla, 1984).

There appear to be four major factors countering the participation of students from underrepresented racial/ethnic minority groups in higher education according to Stampen and Fenske (1989): 1) the sharply accelerating rise in college costs, especially in tuition; 2) continuing inflation, which combines with a level of funding to rob student aid of about one-fifth of its real purchasing power; 3) the shift in aid dollars from grants to loans, a type of aid shunned by many minority students; and 4) a renewed emphasis on high academic quality.

There are several important recommendations for admission policy makers that emerge from the literature on the impact of financial aid on students from underrepresented racial/ethnic groups. A major policy recommendation that has been made is to broaden the scope of financial aid programs as a way to remove barriers to full participation by students from underrepresented racial/ethnic groups (National Task Force for Minority Participation in Higher Education, 1990; Richardson, 1991). With this in mind, to the extent possible, if loans are offered to students from underrepresented racial/ethnic backgrounds, they should be combined with other types of aid in a package. Packaging loans with grants appears to be more effective in promoting recruitment and retention than giving loans as the only form of aid. Colleges should be aware of these tendencies when packaging student aid. Whenever possible, grants should be the first form of aid offered to students from these backgrounds.

4 Retention Issues

Access is only the first step to meaningful participation in higher education for students from underrepresented racial/ethnic groups. If these students are going to participate more fully and successfully in American society, they must successfully complete degree programs. Therefore, retention of students from underrepresented racial/ethnic groups, after their recruitment and admission, remains a singular challenge for both higher education policymakers and practitioners.

Researchers have examined both the student and institutional characteristics associated with high levels of college attrition for students from underrepresented racial/ethnic groups. Ramist (1981) for example associated the attrition problem with socioeconomic background, poor academic preparation, and low aspirations. In addition, researchers have often identified isolation and racial bias as additional problems (Nettles, Theony & Gosman, 1986).

Institutional response to the adjustment of students from underrepresented racial/ethnic groups has nearly a 20-year history. Peterson, Blackburn, Gamson, Arce, Davenport, Roselle, and Mingle (1978) in a study of several institutions that rapidly increased their minority enrollments in the late 1960s and early 1970s identified an array of special,and often separate, programs targeted at minority problems. These included academic support services, curricular responses, and social and cultural programming. This separate programming mirrored what Peterson et al. (1978) observed in the social and intellectual life of the student community as well - an absence of meaningful integration.

In more recent accounts of student relations, it appears that little has changed. Bloom (1987), noted the continued separateness of African American students at the University of Chicago. Rather than voluntary Black separatism, other observers point the finger at continued White racism which prevents meaningful integration at predominately White institutions (Terrell, 1988; Farrell & Jones, 1988).

Regardless of the cause, there seems to be agreement that student segregation is a problem, and for students from underrepresented racial/ethnic groups it can act as a deterrent to successful completion of college. Unfortunately, few institutions seem to be addressing race relations among students directly (Mingle, 1987).

Richardson, Simmons & de Los Santos (1987) studied predominately White public universities that have demonstrated a significant commitment to the retention and graduation of students from underrepresented racial/ethnic groups. While Peterson et al. (1978) found institutions concentrating on social and curricular issues, Richardson et al. found greater emphasis on preparation programs. They also discovered that as the enrollment of students from underrepresented racial/ethnic groups increased, the institutional environment changes from accommodation through special programs to incorporation into the mainstream of the institutional culture.

Future retention policy and programming for students from underrepresented racial/ethnic groups need to be developed with a focus on two key areas: 1) student perceptions of college environment; 2) effective institutional policies, programs, and procedures for improving the retention of students from underrepresented racial/ethnic groups in higher education.

Student Perceptions of College Environment

In order to develop viable retention policies and programs to achieve true campus diversity, it is important to first gauge the perceptions that students from underrepresented racial/ethnic groups

have about the college environment. A review of the literature for the past two decades reveals that there have been a number of research efforts aimed at investigating ethnic minority students' perceptions of the college environment. In the 1970s for example a number of researchers, including Gibbs (1973), Kleinbaum and Kleinbaum (1976), Lyons (1973), Sedlacek and Brooks (1970), Van Arsdale, Sedlacek and Brooks (1970), and Willie and McCord (1972) did research with African American students. The main concern of most of these studies was the adjustment of African American students at predominately White institutions. In general, their findings indicated that African American students at various colleges experienced feeling of isolation in both academic and social situations.

In addition to this research, several researchers attempted to compare the perceptions of different ethnic groups on the same campus. For example, Madrazo-Peterson & Rodriquez (1978) conducted an environmental assessment of African American, Latino/Hispanic (Chicano) and Native American students using the College Student Questionnaire (CSQ) and the Environmental Satisfaction Questionnaire (ESQ). The researchers found significant differences between the ethnic groups on one scale of the ESQ. The data indicated that African American students reported significantly greater feelings of isolation than either Latino/Hispanic or Native American students.

A similar study conducted by Garza and Nelson (1973), compared Chicano (Mexican American) and Anglo perceptions of the university environment using the College and University Environment Scales (CUES). The CUES was administered to 147 Anglo students and 83 Chicano students at a Southwestern university. It was found that the Chicano and Anglo students in this study held significantly different perceptions of the university environment. The findings suggested that Chicano students were not as comfortable in the university environment.

The 1980s saw a continuation of student perception research with investigators attempting more sophisticated studies comparing the perceptions of different ethnic groups. Patterson, Sedlacek and Perry (1984) compared the perceptions of African Americans and Latino/Hispanics in two campus environments, one in the Northeast and the other in the Southwest. The findings suggested that regardless of school, African Americans were more uncomfortable than Latino/Hispanics in interracial campus situations. In addition the researchers found that regardless of school, African Americans were more likely than Latino/Hispanics to believe that a) Whites do not feel superior to them, b) students prefer being with others of their own race, c) Whites feel uneasy when members of their race get together in groups, d) the university does not support their ethnic group in its on-campus activities, and e)the interracial climate on campus and in the community is hostile.

Finally, differences by school, regardless of race, showed that students from the Southwestern school were more likely than their Northeastern counterparts to a) feel left out of things because of their race, b) believe that Whites feel superior to their ethnic group, c) think that Whites feel uneasy when members of their race get together in groups, and d) believe that the interracial climate on campus and in the community is hostile.

In a similar study Oliver, Rodriquez, and Mickelson (1985) investigated the academic and social experiences of Chicano and African American students at UCLA. The findings indicated that African American students are more likely than Chicano students to feel alienated and that social class makes no difference in this outcome for African Americans. However, middle class Chicano students felt less alienated than working class Chicano students.

Several comprehensive studies have been conducted to examine perceptions of students across a number of ethnic minority groups. Patterson and Sedlacek (1979) for example, investigated the interracial experiences, attitudes and perceptions of 54 Asian Pacific, 54 African American, and 39 Latino Hispanic students at a major Northeastern university. The data suggest that more similarities exist between Asian Pacific and Latino/Hispanic students than with African American students. Latino/Hispanic students displayed the greatest amount of interracial interaction and exhibited the most positive perception of the school. African Americans had less favorable perceptions and attitudes toward the college and its environment, and also appeared to be more race- conscious and concerned with racial issues than Asian Pacific or Latino/Hispanic students.

In a similar study Livingston and Stewart (1987) assessed needs that African American, Latino/Hispanic, Asian Pacific, and Native American students perceived in their undergraduate experience on a predominately White, urban campus. The results indicated a need for special programming for students from underrepresented racial/ethnic groups at the university. African Americans expressed strong need for special activities, suggesting that they may not be as fully integrated into university life as other minority group students are.

A salient theme that runs through this research is that if students from underrepresented racial/ethnic groups differ in their basic perceptions of higher education and campus environments, these differences need to be identified and considered to enable these students to better relate to, feel more comfortable in, and better identify with the university environment. It is important that student affairs professionals consider racial and cultural variables in planning, implementing, and evaluating academic and social initiatives.

Effective Institutional Policies, Programs, and Procedures for Improving the Retention of Students from Underrepresented Racial/Ethnic Groups in Higher Education

Effective institutional practices for improving student retention. Attrition of minority students from colleges and universities is a major obstacle to achieving true diversity in higher education. A number of studies have found higher attrition rates among students from underrepresented racial/ethnic groups (Cross & Astin, 1981; Gosman, Dandridge, Nettles, and Thoeny, 1983; Perry, 1981; Suen, 1983; Willie & McCord, 1972).

According to Clewell and Ficklen (1987), the full impact of gains that have been made in enrolling students from these groups over the past decade have been eroded by their higher attrition rate. Closing the gap in educational attainment between minority and nonminority students will require a concerted effort to prevent their withdrawal.

Colleges and universities have tried various programs to improve the retention of students from underrepresented racial/ethnic groups. A review of the literature reveals a number of programs and policies at various colleges and universities that result in good retention rates for students from these groups.

Clewell and Ficklen (1987) for example, conducted a study of four colleges that represented different types, different geographical locations, varying programs and services, and good rates of minority retention. They found the programs studied at these institutions are designed to help students succeed by addressing the academic, financial and personal needs that may present barriers to obtaining a college degree. The strategies used take into consideration the special needs of the minority students at each institution. The first institution provides a very focused, intensive program for a small group of students during their four years on campus. The second institution provides a wide range of services that are well coordinated, reach into the community, and provide assistance on campus. The third institution includes both precollege and college-level activities to recruit, motivate, enroll and retain students. The fourth institution has made a university wide effort to improve retention through academic advising, counseling, skills development, and tutoring. Although the programs and services differed, Clewell and Ficklen found the following elements common to the programs at all four institutions: 1) the presence of a stated policy regarding retention; 2) substantial institutional commitment; 3) a substantial degree of institutionalization of the program; 4) comprehensiveness of services; 5) dedicated staff; 6) systematic collection of data, monitoring and follow-up; 7) faculty support; and 8) no stigma attached to participating in special programs.

Clewell and Ficklen's findings are given credence in a number of other successful institutional practices for improving the retention of students from underrepresented racial/ethnic groups (Boyd, 1989; Christoffel, 1986; Francis, 1989; Garfield & Romano, 1983; Harris, 1990; New Jersey Department of Higher Education, 1988; O'Brien, 1989; Pollard, 1982; Ramirez, 1986; Sullivan, 1982). While these institutional practices differ, there appear to be some components of effective retention

strategies that can be found in all of them. These include, administrative commitment, financial resources, student services, curricula, personnel, comprehensiveness, and timeliness of intervention.

Given funding cutbacks and lagging opportunities for students from underrepresented racial/ethnic groups in higher education, colleges and universities must make a concerted effort to retain minority students and to increase their chances of success. According to Morton (1982), those in higher education leadership position must realize that they have a responsibility to address the needs of minority students. College presidents and program developers should encourage an institutional environment that reflects and supports ethnic diversity. In addition to strong leadership, successful efforts regarding minority student opportunity and retention require the commitment and participation of the entire college or university staff.

Effective Transition Programs

In many instances insuring retention may necessitate easing the transition to college life for students from underrepresented racial/ethnic groups. This is particularly the case when such students are academically able, but come from educationally disadvantaged backgrounds. They may enter the college scene with academic skill deficiencies.

Significantly, a review of the literature reveals a number of prototypical orientation and academic programs to help students from underrepresented racial/ethnic groups with skill deficiencies that are the result of educational disadvantage make the transition to college life. While they may have different methods, the major goals of these transition programs are to orient students to the university, introduce them to academic majors, help build self- esteem, provide interaction with successful upper classpersons, and increase motivation toward college achievement.

There are a number of such successful transition programs which help students bridge the secondary and postsecondary experiences. In a comprehensive study, Miller (1988) compares and contrasts the structural components of minority summer retention programs at twenty predominately white universities. Several representative transition programs provide a closer look at the dynamics of such bridge experiences. Ackerman and Byock (1989) for example, report on the Freshman Summer Program at UCLA designed to increase the academic achievement, retention, and graduation of underprepared and underrepresented students. The program consisted of components in mathematics, English, and general education. The program curriculum was accompanied by a tutoring program, counseling services, social opportunities, and political and social events. An evaluation of the program indicated the effectiveness of, and satisfaction with the program.

Myers and Drevlow (1982) report on the results of a similar program at the University of California, San Diego. The program called the Summer Bridge Program provided three weeks of intensive instruction in mathematics, reading, writing and study skills. The students participated in diagnostic testing, tutoring, and individual and group counseling. The authors point out that Summer Bridge is not a remedial program, but is designed to address many issues that affect a students decision to stay at a college or university.

The summer "bridge" part of the Special Transitional Enrichment Program (STEP) at the University of California, Davis was evaluated by Suhr (1980) with attention to first-year academic performance and retention. STEP is an orientation program to help students from underrepresented racial/ethnic groups make transition to the university curriculum. Suhr found that STEP significantly affected retention.

Likewise, the SEEK Prefreshman Summer Program at Baruch College was reported on by (Tan, 1985). This program, held for six weeks during the summer prior to college for 94 freshmen from educationally and economically disadvantaged backgrounds, had as its goal improving students' academic and coping skills in order to improve their chances of success in college. While Tan reports mixed overall results for the program, program participants who advanced after completing the summer continued to show adequate overall performance.

Institutional Policies on the Achievement of Students from Underrepresented Racial/Ethnic Groups

Increasingly, state governments and university systems are shifting minority program emphasis away from recruitment toward keeping students in college until they graduate (Cage, 1989). If institutions of higher education are to improve the achievement rates of students from underrepresented racial/ethnic groups without sacrificing quality then there are a number of important issues that must be addressed (Richardson, 1989 and 1990). Crosson (1987 and 1988) in discussing findings concerning environmental factors that relate to minority degree achievement in predominately White four-year colleges and universities delineated key strategies for improving the achievement levels of minority group students including: pre- college programs and services addressing preparation problems and the academic environment, promoting student involvement in campus life, and close attention to campus racial climate.

Lynch (1985) suggests that once in college, active involvement in goal setting, attending classes, talking to professors, and involvement in student activities are among the factors that produce students who achieve excellence in higher education. Therefore, it is incumbent upon university officials to make these notions important aspects of achievement policies. Likewise, Miller (1990) in reviewing current minority involvement in higher learning and suggesting a comprehensive approach to improving minority achievement, presents components of effective retention strategies, including administrative commitment, financial resources, student services, curricula, personnel, and timeliness of intervention.

Significantly, Richardson (1990) in discussing the concept of achieving quality while maintaining diversity cites important issues that must be addressed if institutions of higher education are to improve minority achievement rates without sacrificing quality. These include, helping minority students graduate, planning strategically, encouraging perceptions comfort, expecting support from faculty, presenting reflective curriculums, and promoting diversity.

According to Richardson (1989) there are two general approaches that have been used to promote academic achievement of students from underrepresented racial/ethnic backgrounds. In the first, special-access programs provide a parallel track to a college degree. The federally funded TRIO programs and state-funded equal opportunity equivalents are comprehensive examples of this approach.

The alternative is to create learning environments that support achievement by diverse student populations with varying levels of precollege preparation. Unlike the parallel track approach, the second alternative relies on changes in the values and practices of faculty members. Changing the values that govern faculty behavior in a situation where uniform academic standards are maintained and students from underrepresented racial/ethnic backgrounds achieve at optimal levels requires management of the organizational culture. According to Richardson (1989), the goal is to create an environment in which an emphasis on achieving campus diversity is matched by comprehensive strategies to help all students achieve.

Cognitive/Learning Style Differences: Implications for Educational Practices

Cognitive/learning style is a concept that can be important in the movement toward creating learning environments that support achievement by diverse student populations with varying levels of precollege preparation. Information about students' cognitive/learning style can help faculty members become sensitive to the differences students bring to the classroom and can guide the design of learning experiences that either match students' styles or stimulate learning in new ways (Claxton & Murrel, 1988). Social scientists generally agree that different cultures have different cognitive/learning styles. Unfortunately the identification of the cognitive/learning styles of minority students have been ignored in retention efforts because of the ethnocentric notion on the part of Whites that

minorities do not have a valid and substantive cognitive framework which may be somewhat different but equally effective for them (Anderson, 1988)

According to Anderson (1988) the cognitive/learning style of a group of people is strongly influenced by the cultural history of that group. No cognitive/learning style is better than another. However, in the United States the European-American style is projected in most institutions (including institutions of higher education) as being the one that is most valued. This cognitive/learning style is considered to be the **field-independent cognitive style**. This style is highly analytic and characterized by emotional discipline. Individuals with this style perceive elements as discrete from their background, do best on analytic tasks, learn material that is inanimate and impersonal more easily, and their performance is not greatly affected by the opinions of others. As previously indicated, this style matches up with most school environments.

Conversely, the cognitive/learning style developed by many students from underrepresented racial/ethnic groups is considered to be the **field-dependent style**. This style is relational and holistic and characterized by emotional expressiveness. Individuals with this style perceive elements as a part of a total picture, do best on verbal tasks, learn material which has a human social content and which is characterized by fantasy and humor, their performance is influenced by authorizing figure's expression of confidence or doubt. Significantly, this style conflicts with the traditional school environment.

According to Anderson (1988), cultural and cognitive conflict often occur when a group is asked to perform in a manner and setting which is foreign to their style or does not capitalize on it. Such is the case with many students from underrepresented racial/ethnic groups in the college setting.

Given differences in cognitive/learning style differences it is important for educators to be sensitive to and respectful of student's cultural learning style without stereotyping. Matching teaching styles to learning styles is necessary; a student's cognitive/learning style is neither an excuse for poor teaching nor an index of low capacity (Hilliard, 1989).

A number of scholars have called for an appreciation of cognitive/learning styles in the minority retention policies of colleges and universities (Ainsworth, 1986; Claxton & Murrell, 1987 and 1988; Santa-Cruz, 1982). The major idea that permeates this call is that more effective learning can be promoted through: 1) professional development activities on the application of the concept of cognitive/learning styles, 2) encouragement of classroom research using the concept of cognitive/learning styles, 3) developing curricular experiences that help students learn to learn, and 4) in hiring faculty, considering candidates' understanding of teaching-learning practices that take into account individual differences.

Noncognitive variables affecting student performance

Historically, academic success has been viewed as largely related to academic dimensions (Pentages & Creedon, 1978). However, growing evidence indicates that noncognitive dimensions are as important or more important to academic success than are the traditional academic dimensions (Astin, 1975; Gelso & Rowell, 1967; Messick, 1979; Nelson, Scott, & Bryan, 1984; Pascarella & Chapman, 1983; Pascarella, Duby & Iverson, 1983; Tinto, 1974; Tracey & Sedlacek, 1985).

As mentioned previously, Sedlacek & Brooks (1976) hypothesized that these noncognitive dimensions may be more important than traditional academic measures to the academic success of students from underrepresented racial/ethnic groups. They proposed seven noncognitive variables that are related to academic success: 1) positive self-concept; 2) realistic self-appraisal, 3) understanding of and an ability to deal with racism, 4) preference for long-term goals over more immediate, short-term needs, 5) availability of a strong support person, 6) successful leadership experience, and 7) demonstrated community service.

Tracey and Sedlacek (1985) attempted to examine the predictive validity of noncognitive variables for African American and White students at various points over four years of college. They were interested in how traditional and nontraditional predictors relate to academic success beyond the first year of college, which is typically studied. Besides extending the predictive validity of the noncognitive variables to four years, the longitudinal design of the study enabled investigation of the different variables related to academic success at various points during those four years.

The results of the study indicated that the noncognitive variables were predictive of GPA's for both races. The noncognitive variables yielded consistent predictions over four years. For African American students, the noncognitive variables seemed particularly pertinent to persistence. Across all four years, the noncognitive variables of positive self-concept, realistic self- appraisal, and academic familiarity were related to persistence in college.

These results are important because they suggest that a different process may be involved in academic achievement for minority and White students. Many variables are related to the academic success of minority students that are different from those of White students. College officials therefore should design intervention programs to address these variables before students from underrepresented racial/ethnic groups experience adjustment problems.

According to Tracey and Sedlacek (1985), the larger issue related to the importance of noncognitive variables is whether or not institutions of higher education can be changed so that these variables do not play such different roles for different racial groups. To perform as well as White students, students from underrepresented racial/ethnic groups must demonstrate a greater variety of characteristics, not just academic ability.

Selection of College Majors

A review of bachelor's degrees conferred by institutions of higher education, by racial groups in the period 1976-77 to 1986-87 (National Center for Education Statistics, 1990), gives some indication of college majors that have been selected by students from underrepresented racial/ethnic groups over that last decade. Three areas appear to be of particular interest, education, engineering, and business. African American students appear to have chosen business majors in significantly greater numbers than students from other racial/ethnic groups. Likewise, they chose education majors in far greater numbers than Latino/Hispanic, Asian Pacific, or Native American students. Asian Pacific students on the other hand chose engineering majors in significantly greater numbers than students from the other groups.

Academic Advising

Academic advising support services have been recognized only recently as a key to student retention (Glenman, 1976; Noel, 1978; Scher, 1979). The academic advising conference is often one of the first contacts a new student has with the college. This initial contact is extremely important with students from underrepresented racial/ethnic groups as there may exist an element of mistrust of an authority figure, particularly if he or she is a nonminority (Willie & McCord, 1972).

A search of literature on academic advising however, reveals a minimum of articles and support data on advising students from underrepresented racial/ethnic groups. Most writings about students from these groups address some phase of counseling or multicultural counseling (Clayton and Lewis, 1984).

Crosson (1987) in discussing findings concerning environmental factors that relate to degree achievement for students from underrepresented racial/ethnic groups, states that successful campus efforts to improve minority degree achievement generally include strong academic advising programs. This notion is given credence by Purnell (1983) and Jackson (1984). The latter author provides advice about advising students from underrepresented racial/ethnic groups. Included in this advice are a list of hints concerning personal relations and student retention, educational development, financial assistance, and career planning.

In a similar vein, Clayton (1982) carefully delineates fourteen tasks that are considered important for advising students from underrepresented racial/ethnic groups. Collectively these tasks are designed to assist academic advisors in an examination of the balance of common and unique cultural elements in advising and expectations that students from underrepresented racial/ethnic groups either change the world or themselves. This same author, with a colleague, also offers academic advisors some resources for advising minority students (Clayton and Lewis, 1984).

Several studies of academic advising with students from underrepresented racial/ethnic groups are of note. Burrell and Trombley (1983) surveyed over 300 minority students to determine their perception of academic advising on five predominately White campuses. The findings of the survey suggest that minority students perceive academic advising as their most important support resource, particularly in the their first two undergraduate years. In addition, it was found that few minority students indicated that they would seek advisement from White officials.

The impact of developmental advising activities with high- achieving African American students at an Eastern university was investigated by Novels and Ender (1988). Results suggested that involvement in developmental advising had a positive impact on participating student's cumulative grade point average.

As Clayton and Lewis (1984) have pointed out the college campus is a microcosm of society and it must provide students from underrepresented racial/ethnic groups with academic advising so that their maximum potential as individuals and as members of the total community may be realized. Academic advisors can play a key role in easing the transition of students from these groups to the campus environment. As Burrel and Trombley (1983) suggest, when discussing an incoming student's academic needs, an advisor can demonstrate sensitivity to their adjustment stress by encouraging them to discuss their expectations of college and career aspirations.

Clayton (1978) emphasized that the overriding concern of both minority and majority advisors when working with students from underrepresented racial/ethnic groups is to help them confront a different social culture while striving to succeed academically.

Institutional Environment

Crosson (1988) reports that by 1987, all colleges and universities had a variety of policies, programs, and services to help students in general and students from underrepresented racial/ethnic groups in particular, successfully manage college life. The problem for most institutions is assessing the strengths and weaknesses of established structures, programs, and services; finding ways of measuring campus climates and anticipating racial tensions; and deciding what changes will better provide for students from these groups.

For Crosson, two things are abundantly clear. First, student background, including levels of academic preparation and achievement, relates significantly to prospects for degree attainment. Second, campus environments and the dynamics within those environments are also importantly related to degree attainment. When the research focus on minority retention and degree achievement is narrowed, there is consistently more negative associations between campus environment and degree achievement (Allen, 1986; Beckham, 1988; Bennett & Okinaka, 1989; Burbach & Thompson, 1971; Fields, 1986;, 1987; Fleming, 1984; Greene, 1987; Loo & Rolison, 1986; Madrazo & Rodriquez, 1978; Simpson, 1987).

The demonstrated structural and organizational attributes of campus environments that relate to high rates of student persistence include size, form of control, residential or commuter status, selectivity, and income per student. Small private, residential, academically selective, and wealthy colleges are consistently more successful at retaining and graduating larger proportions of their entering freshman than are other institutions (Clewell and Ficklen, 1986; Rock, Centra, and Linn, 1970).

Nettles, Thoeny, and Gosman (1985) in work with large White and African American samples found that students with high grade point averages have low feelings of racial discrimination, few interfering problems, high satisfaction with their university, relatively good study habits, relatively high academic integration, perceive low levels of faculty influence on student development, aspire beyond their bachelor's degree, are members of the racial majority on their campus, are married, and have relatively strong peer relationships.

Other studies, however, that have compared environmental factors directly to minority degree achievement have found evidence of negative environmental influences. Nettles, Theony, and Gosman (1985) found that student satisfaction, peer group, relations, and interfering problems are all greater grade performance predictors for African American students than for White students. Comparing African American and White responses to environmental variables, they found that African American students have significantly lower academic integration, are more likely to feel that the university is discriminatory, are less satisfied with their university, have more interfering problems and have poorer study habits than white students. In a similar study, Allen (1985) found that African American students on White campuses are significantly less involved with campus life than are White students. African American students on White campuses are also much less likely to report excellent relations with White faculty members.

A significant study by Richardson, Simmons, and de los Santos (1987), examined the organizational influences on baccalaureate achievement by students from underrepresented racial/ethnic groups in ten public, predominately White colleges and universities, which awarded a substantial number of degrees to students from these groups. The researchers report the following six conclusions from their data: 1) minority achievement is viewed as a preparation problem rather than a racial problem; 2) the campus environment is recognized as a critical factor in student involvement and success; 3) small numbers of minority faculty members and limited involvement in equal opportunity strategies by all faculty members are problems needing urgent attention by these universities; 4) there is visible evidence of administrative commitment; 5) strategies for promoting the success of minority students in predominately White institutions or for promoting the success of all students in multicultural institutions were comprehensive and systematic rather than fragmented and sporadic; and 6) the most progress has occurred among universities where institutional commitment and good educational practices are enhanced by a favorable state policy environment.

Like other research findings the Richardson, Simmons, and de los Santos study found that in addition to academic factors, five other factors can help improve social integration for students from underrepresented racial/ethnic groups: 1) the size of the minority population, location of the institution, community involvement, financial aid, and residence halls.

To further compound the challenges of the person-environment fit for minority students is the resurgence of racially motivated harassment and violence directed at students of color at predominately White institutions of higher education. As Crosson (1988) suggests, the racial climate on many campuses is not healthy. Reports are describing serious racial problems with ever greater frequency. These incidents have occurred at prestigious universities with strong liberal traditions and at selective liberal arts colleges. (Clay, 1989; Crosson, 1988; Farrell, 1988; Farrell & Jones, 1988; Simpson, 1987; Williams, 1987). According to Farrell and Jones (1988), these incidents have emerged in during a period when the society, in general, has expressed concern over declining college enrollments of students from already underrepresented racial/ethnic groups.

As Crosson (1988) indicates, while the depth of racist and discriminatory attitudes and behaviors are unknown, it is clear that many White institutions of higher education have failed in some respects to live up to their ideals as civil and tolerant social communities that respect cultural pluralism. It is also clear that many students from underrepresented racial/ethnic groups perceive White campuses as hostile to their academic and social well-being.

Campus climate refers to the aggregated perceptions or feelings of individuals in the college or university about the institution (Crosson, 1988). How students from underrepresented racial/ethnic

groups assess the climates of their colleges and universities has important implications for retention, student satisfaction, persistence and degree achievement.

Curriculum Content

Assuring the academic success of students from underrepresented racial/ethnic groups requires the rethinking of curricula to meet the needs of these students.

Beginning in the 1960s, curriculum specialists (Grant, 1977; Banks, 1983) began to call for and develop multicultural curricula. At the postsecondary level, curriculum specialists and student activists called for the establishment of ethnic studies departments. African American studies and Chicano studies departments began to appear on many campuses, along with Native American and Asian Pacific studies, especially where student populations made these demands. Courses offered by these ethnic studies departments were at best considered electives and at worst a gesture of appeasement to student activists. A tension between cultural pluralism and cultural hegemony within such institutions was strongly felt (Zita, 1988).

Glock (1990), however, in rethinking the curriculum to meet the needs of students for the twenty-first century offers an alternative to such tension. According to Glock general education offerings should be restructured to give students the skills and resources needed to make sense out of their particular ethnicity, while emphasizing not the old worlds or the new world, but the world shared by students and teachers. The resulting core curriculum would be : 1)socially cohesive, providing common reference points to all members of society; 2) culturally inclusive, drawing upon diverse human cultures and affirming the contributions of all social classes; 3) ethically selective, supporting values necessary to environmental and species survival and human fulfillment; 4) conceptually generative, providing skills and general principles which allow for the synthesis and critical assessment of information; and 5) personally significant, creating options for in-depth study of particular cultures, classes, and conditions.

Glock states that skills would be developed across the curriculum by making improvement in reading, writing, speaking, listening, and thinking the responsibility in every discipline. In revising curricula, colleges must be prepared to meet the challenges of new technology, the need for qualified faculty, and the need for resources to develop new texts, courses and skills necessary to teach the new curriculum.

Within the context of Glock's blueprint, many institutions of higher education have attempted to infuse cultural diversity into the curriculum (Ognibene, 1989; Wiley, 1989; Zita, 1988). In addition to exposing all students to the concept of diversity, these attempts at broadening the cultural base of the required curriculum helps students from underrepresented racial/ethnic groups feel respect for their cultural heritages in order to help them develop positive identifications with colleges and universities.

Ethnocentrism and cultural isolation currently characterize much of contemporary college curricula. However, by adopting a culturally inclusive, interdisciplinary approach to curriculum development, colleges and universities may increase the chances of academic success for all students.

Presence of Faculty Members from Underrepresented Racial/Ethnic Groups

It has been suggested that the presence of faculty members from these groups will enhance retention and graduation efforts (Crossen, 1987, 1988; Richardson, 1989). However, evidence indicates that there are still relatively few minority group faculty members on many campuses (Nickson, 1982; Olivas, 1988).

It has been suggested (Dill & Dill, 1990; Nickson, 1982; Olivas, 1988) that minority faculty can bring a commitment to equality, justice, and pluralistic education to an institution of higher education.

They may be the only teachers who can effectively reach students from underrepresented racial/ethnic groups. In addition, they also have the potential for forming beneficial mentoring relationships with students who may need special incentives and guidance to persist to graduation.

Nickson (1982) states that minority students will only survive in direct ratio to the input and impact of faculty and staff from underrepresented racial/ethnic groups. It is important therefore that retention policy for students from these backgrounds include concerted efforts to recruit and retain minority faculty and staff.

Counseling Services

Counseling services that are effective under traditional circumstances will not necessarily be effective with students from underrepresented racial/ethnic groups (Sue, 1978). Over the past decade, a considerable volume of research regarding counseling services and students from these groups. Researchers have generally found that minority students do not necessarily seek out university counseling centers for help with problem resolution or decision-making in the same fashion as their White counterparts (Cimbolic, Thompson & Waid, 1981; Sanchez & King, 1986; Tinsley, de St. Aubin & Brown, 1982; Atkinson, Ponterotto & Sanchez, 1984).

Within the context of improving the person-environment fit for students from underrepresented racial/ethnic groups a number of suggestions have been brought forward to improve counseling services (Cervantes, 1988; Ford, 1983; Jackson, 1984; Trippi & Cheatham, 1989; Wright, 1985; Zuniga, 1987). The majority of the suggestions center around insuring that counseling centers have minority staff members and offer support programs. It is important that counselors be mobile, informal, accessible and visible. While, the bulk of the counseling services tend to revolve around academic, financial, and social concerns. It is important that counseling services make efforts to address the personal counseling issues of student from underrepresented racial/ethnic groups, since they have tended to be ineffective in doing so.

Comprehensive, culturally relevant counseling services are seen as crucial to promoting a college environment that is conducive to academic persistence (Crosson, 1987 1988; Richardson, 1989). Therefore relevant counseling programs must be an integral part of retention policies and programming.

CONCLUSION

The future of America's institutions of higher education and ultimately society as a whole, depends, in part, on the ability of educators to improve the retention and academic preparation of young people who traditionally have been underrepresented on college campuses. Demographic trends indicate that the nation's economy will be dependent on the contributions of minority workers who will comprise 60 percent of the labor force. Yet, school statistics indicate that large numbers of minority students drop out of high school, and those that do graduate are not prepared for postsecondary education.

College admission officials can play a proactive role in empowering these young people for maximum educational achievement and optimal lives in the twenty first century. Accomplishing this will require a comprehensive and systematic approach to the issues of college recruitment and retention.

The literature surveyed in this document, would suggest that a proactive approach to the educational empowerment of students from underrepresented racial/ethnic groups should entail several things. First, students' high school experience should be enriched through preparation programs that are created through partnerships with colleges and universities. These programs should be designed to expose students to the college environment and motivate them to high academic performance in concerted recruitment efforts.

Second, the retention of underrepresented students should be enhanced by planning strategically, encouraging perceptions of comfort, expecting support from faculty, presenting reflective curriculums, and promoting diversity. These things should be done with the aim of having students persist and receive degrees.

As the twenty first century approaches, institutions of higher education are faced with the challenge of improving minority participation and achievement rates without sacrificing academic quality. Admission counselors, in partnership with other educators, can play a major role in addressing this challenge.

31

REFERENCES

Ackerman, S.P. & Byock, G. J. (1989). *Evaluation of the 1988 freshman summer program and transfer summer program.* University of California at Los Angeles. Office of the Provost.

Ainsworth, C. L. (1986, January). *The college classroom: Changing climate and cultures.* Paper presented at Regional Conference on University Teaching, Las Cruces, New Mexico.

Allen, W. R. (1985). Black Student, White campus: Structural, interpersonal and psychological correlates of success. *Journal of Negro Education,* 54, 134-147.

American Association of State Colleges and Universities (1985). *Student aid and minority enrollment in higher education.* Washington, D.C.: American Association of State Colleges and Universities.

Anderson, J. (1988). Cognitive styles and multicultural populations. Journal of Teacher Education, 39, 2-9. Applegate, R.R. & Henniger, M.L. (1989). Recruiting minority students: A priority for the '90s. Thought and Action, 5, 53-60.

Ascher, C. (1983). *Helping minority students with nontraditional skills enter and complete college. ERIC/CUE fact sheet number 17.* New York, NY: ERIC Clearinghouse on Urban Education.

Ashworth, K.H. (1980). The pendulum and the pit: Testing under the knife. *College Board Review,* 117, 14-17.

Astin, A.W. (1975). *Preventing students from dropping out.* San Francisco: Jossey-Bass Astin, A.W. (1979, April). Testing in the post "Bakke" period. Address presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Astin, A.W. (1982). *Minorities in American higher education. Recent trends, current prospects, and recommendations.* First edition. San Francisco, CA: Jossey-Bass, Inc.

Astin, A.W. & Cross, K.P. (1979). *Student financial aid and persistence in college.* Los Angeles: Higher Education Research Institute.

Atkinson, D. R., Morten, G., & Sue, D. W. (1979). *Counseling American minorities: A cross-cultural perspective.* Dubuque, Iowa: W. C. Brown.

Astone, B. & Nuney-Wormack, E. (1990). *Pursuing Diversity: Recruiting College Minority Students.* Washington, DC: ERIC Clearinghouse on Higher Education, George Washington University.

Atkinson, D.R., Ponterotto, J.G. & Sanchez, A.R. (1984). Attitudes of Vietnamese and Anglo-American students toward counseling. *Journal of College Student Personnel,* 25, 448- 454.

Bailey, R.L. & Hafner, A.L. (1978). *Minority admissions.* Lexington, MA: D.C. Heath and Co.

Banks, J. (1983). Ethnicity and curricular reform. In R. Samuda & S. Woods (Eds.), *Perspectives in immigrant and minority education.* New York: University Press of America.

Beckham, B. (1988). Strangers in a strange land: The experience of Blacks on White campuses. *Educational Record,* 68, 74-78.

Bennett, C. & Okinaka, A. M. (1989, March). *Factors related to persistence among Asian, Black, Hispanic, and White undergraduates at a predominately White university:Comparison between first and fourth year cohorts.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Boyd, V. (1989). *A fraternity-based retention intervention for Black male freshmen.* Research report #02-89. College Park, MD: University of Maryland.

Burbach, H. J. & Thompson, M.A. (1971). Alienation among college freshmen: A comparison of Puerto Rican, Black, and White students. *Journal of College Student Personnel,* 12, 248-252.

Burrell, L.F. & Trombley, T.B. (1983). Academic advising with minority students on predominately White campuses. *Journal of College Student Personnel,* 24, 121-126.

Cage, M.C. (1989, April). More minority programs now emphasizing efforts to keep students enrolled in college. *Chronicle of Higher Education,* 35, pp 1, 24.

Carter, D. J. & Wilson, R. (1989). *Eighth Annual Status Report: Minorities in Higher Education.* Washington, D.C.: American Council on Education Office of Minority Concerns.

Cervantes, O. F. (1988). *What universities and counseling centers can do to address the problem of low admission, attrition, and retention of minority students.* California.

Chappell, W.R. & Baur, J.F. (1971). *A physics-oriented college motivation program for minority students.* Boulder, CO: University of Colorado, Department of Physics and Astrophysics.

Cheatham, H.E. (1982). Recruiting minority students: An evaluation. *Journal of College Student Personnel.* 23, 29-32.

Christofel, P. (1986). *Minority student access and retention: A review. Research and development update.* New York, NY: College Entrance Examination Board.
Cimbolic, P., Thompson, R.A. & Wald, L.R. (1981). A comparison of Black and White students' preferences for help sources other than the university counselor. *Journal of College Student Personnel.* 22, 342-348.
Clayton, B. (1982). Minority advising resources: An example of consultative services. *NACADA Journal,* 2, 30-345.
Claxton, C.S. & Murrel, P.H. (1987). *Learning styles: Implications for improving educational practices.* Washington, D.C.: ERIC Clearinghouse on Higher Education.
Claxton, C.S. & Murrel, P.H. (1988). *Learning styles.* Washington, D.C.: ERIC Clearinghouse on Higher Education.
Clayton, B. & Lewis, W. M. (1984). Some resources for advising minority students: CESHEP, Black colleges and Black members of NACADA. *NACADA Journal,* 4, 83-88.
Clewell, B. C. & Ficklen, M. S. (1987). Effective institutional practices for improving minority retention in higher education. *Journal of College Admissions,* 116, 7-13.
Cole, B.P. (1987). College admissions and coaching. *Negro Educational Review,* 38, 125-135.
College Board (1989). *Trends in student aid: 1980-1989.* New York, NY: The College Board.
College Entrance Examination Board (1970). *Admission of minority students in Midwestern colleges. Higher education surveys.* Evanston IL: College Entrance Examination Board.
Commission on the Higher Education of Minorities (1982). *Final report.* Los Angeles: Higher Education Research Institute, Inc.
Cordes, C. (1985, January). At risk in America: Black males face high odds in a hostile society. *APA Monitor,* pp. 9, 10, 11, 27.
Cornett, L.M. (1986). *Improving student preparation: Higher education and schools working together.* Atlanta, GA: Southern Regional Education Board.
Cox, W. E. & Jobe, C. C. (1988). Recruiting wars: Can higher education compete with the military? *Educational Record,* 68, 63-69.
Cross, W. E. (1971). The Negro-to-Black conversion experience. *Black World, 20,* 12-27.
Crosson, P.H. (1987). *Environmental influences on minority degree attainment. ASHE Annual Meeting Paper.* Washington, D.C.: Office of Educational Research and Improvement.
Crosson, P.H. (1988). Four-year college and university environments for minority degree achievement. *The Review of Higher Education, 11,* 365-382.
Dershowitz, A.M. (1896, March 12) The end of affirmative action ruling criticized. *Albany Times Union,* pp. 1,8.
Dill, B.T. & Dill, J.R. (1990), To be Mature, tenured, and Black: Reflections on 20 years of academic partnership. *Change, 22,* 30-33.
Dorsey-Gaines, C. & Lewis, B.J. (1987). How to start a minority recruitment program: A case study. *Journal of College Admissions,* 116, 3-6.
Dupre, B.B. (1979). *University family: Institutional commitment to educational opportunities for Black students.* Paper submitted to the American Council on Education for the Fellows Program in Academic Administration.
Eddins, G. (1982). *Specially admitted Black students' academic achievement as predicted by nontraditional variables.* Unpublished manuscript, University of Pittsburgh
Fallows, J. (1980). The test and the "brightest." How fair are the college boards? *Atlantic,* 245, 37-48.
Farrell, C. (1988, February). Rising concern over campus racial bias marked at Northern Illinois conference. *Chronicle of Higher Education,* pp. A35-A36.
Ferrel, W.C. & Jones, C. K. (1988). Recent racial incidents in higher education: A preliminary perspective. *Urban Review,* 20, 211-226.
Fields, C.M. (1986, September 16). Closing the education gap for Hispanics: State aims to forestall a divided society. *Chronicle of Higher Education,* pp A1, A33, A37-A38.
Fiske,E.B. (1985, October 17). Minority enrollment in colleges is declining. *New York Times.* p. 60.
Fleming, J. (1984). *Blacks in college.* San Francisco: Jossey Bass.
Ford, R.C. (1983). *Counseling strategies for ethnic minority students.* Olympia, WA: Washington Office of the State Superintendent of Public Instruction. Office of Equity Education.
Francis, P. (1989). *Center for minority and women's studies.* Washington, D.C.: American Association of State Colleges and Universities.
Freiberg, P. (1991, May). Separate classes for Black males? *The APA Monitor,* 22, pp 1, 47.
Fries, J. E. (1987). *The American Indian in Higher Education, 1975-76 to 1984-85.* National Center for Education Statistics, U.S. Department of Education, Washington, D.C.: U.S. Government Printing Office.
Freund, W.H. (1991). *Race/Ethnicity trends in degrees conferred by institutions of higher education: 1978-79 through 1988-89.* National Center of Education Statistics, U.S. Department of Education, Washington, D.C.: U.S. Government Printing Office.
Fuller, B. & McNamara, P.P. (1978). Defining and assessing disadvantagement. *New Directions for Higher Education, 6,* 61-73.

Fund for the Improvement of Postsecondary Education (1987). *Project Discovery: College option orientation program. FIPSE final report.* Washington, D.C.: Fund for the Improvement of Postsecondary Education.

Garza, R.T. & Nelson, D.B. (1973). A comparison of Mexican- and Anglo-American perceptions of the university environment. *Journal of College Student Personnel*, 14, 399-401.

Garfield, J.B. & Romano, J.L. (1983). *Retention and academic achievement in higher education: The general college PEP program (PEP I, II, III).* Minneapolis, MN: General College, University of Minnesota.

Gary, L.W. (Ed.). (1981). *Black men.* Beverly Hills, CA: Sage.

Gelso, C.J. & Rowell, D. (1976). Academic adjustment and persistence of students with marginal academic potential. *Journal of Counseling Psychology*, 14, 478-481.

Getzel, G. (1983). Speculations on the crisis in social work recruitment: Some modest proposals. *Social Work*, 28, 235- 237.

Gibbs, J.T. (1973). Black students/White university: Different expectations. *Personnel and Guidance Journal*, 51, 463-469.

Gibbs, J.T. (1984). Black adolescents and youth: An endangered species. *American Journal of Orthopsychiatry*, 54, 6-21.

Glenman, R.E. (1971). *Faculty counseling: An important and effective aspect of student development.* Toronto: Paper presented at the meeting of the Canadian Guidance and Counselling Association.

Glock, N. C. (1990, February-March). *Rethinking the curriculum to meet the needs of underprepared, underrepresented, and economically disadvantaged students: Majors and courses for the 21st. century.* Paper presented at the Annual Conference on Ethnic and Language Minorities, Sacramento, CA.

Goldman, R. D. & Widwaski, M.H. (1976). An analysis of errors in the selection of minority college students. *Journal of Educational Measurement*, 13, 185-200.

Gordon, M.A. (1976). The correlation between performance in secondary school and performance on the ACT or SAT Test. *College and University*, 52, 107 110.

Gosman, E.J., Dandridge, B.A., Nettles, M.T. & Theony, A.R. (1983). Predicting student progression: The influence of race and other student and institutional characteristics of student performance. *Research in Higher Education, 18*, 209- 236.

Grant, C. (Ed.) (1977). *Multicultural education: Commitments, issues, and application.* Washington, D.C.: Association for Supervision and Curriculum Development.

Grant, M.L. & Singleton, R. (1982). Alternative admissions criteria in the 80's. *Negro Educational Review*, 33, 167-175.

Green, K. C. (1982). *Government support for minority participation in higher education.* Washington, D.C.: American Association of Higher Education.

Green, E. (1987, November). Asian Americans find U.S. Colleges insensitive, form campus organization to fight bias. *Chronicle of Higher Education*, 34, pp 1, 38-40.

Green, R.L. & Farquhar, W.W. (1965). Negro academic achievement motivation and scholastic achievement. *Journal of Educational Psychology*, 56, 241-243.

Gregg, S. (1989, February) Paucity of Black men stymies collegiate environment. *Black Issues in Higher Education*, 5, pp 2-3.

Halcon, J.J. (1989). Exemplary programs form college-bound minority students. In M. Odell & J.J. Mock (Eds). *A crucial agenda: Making colleges and universities work better for minority students.* Boulder CO: Western Interstate Commission for Higher Education.

Hansen, W.L. (1982). *Economic growth and equal opportunity: Conflicting or complementary goals in higher education.* Washington, D.C.: National Institute of Education.

Hansen, W.L. & Stampen, J.O. (1987). *The balance between quality and access in higher education.* Wisconsin Center for educational research, University of Wisconsin-Madison.

Harris, D. M. (1990). *The Glassboro State College retention program.* Washington, D.C.: American Association of State Colleges and Universities.

Haviland, M.G., Horswill, R.K., O'Connell, J.J. & Dynneson, V.V. (1983). Native American college students' preference for counselor race and sex and the likelihood of their use of a counseling center. *Journal of Counseling Psychology, 30*, 267-270.

Hawkins, B.C. (1989). Minority students on predominately White campuses: The need for a new commitment. *NASPA Journal*, 26, 175-179.

Helms, J.E. & Willis, C.A. (1975). Factors contributing to the attrition of precollege minority students prior to freshman year. *Journal of College Student Personnel*, 16, 490-492.

Hilliard, A.G. (1989). Teachers and cultural styles in a pluralistic society. *NEA Today*, 7, 65-69.

Iwai, S.A. & Churchill, W.D. (1982). College attrition and the financial support systems of students. *Research in Higher Education, 17*, 105-113.

Jackson, B. (1975). Black identity development. MEFORM. *Journal of Educational Diversity and Innovation*. 2, 19-25.

Jackson, G. A. (1984). *Helpful hints for advising and counseling minority students in White colleges and universities.* Ames, Iowa: The Black Cultural Center.

Johnson, R.E. (1981). Attracting minority students to the selective independent school. *Journal of the National Association of College Admissions Counselors, 26,* 16-24.

Johnson, R.E. (1989). Beef stew in the melting pot: A recipe for developing a multi-cultural program. *Campus Activities Programming, 22,* 62-65.

Jones, L.G. (1979). *Black students enrolled in White colleges and universities: Their attitudes and perceptions.* Atlanta, GA: Southern Regional Education Board.

Kleinbaum, D.G. & Kleinbaum, A. (1976). The minority experience at a predominately White university—A report of a 1972 survey at the University of North Carolina at Chapel Hill. *Journal of Negro Education, 45,* 312-328.

Krajewski, R.J. & Simmons, B.J. (1988). The role of colleges in the recruitment and retention of minorities. *Teacher Education & Practice,* 4, 53-63.

Leavy, W. (1983, August). Is the Black male an endangered species? *Ebony,* pp. 40-49

Lee, C.C. (1991). Cultural dynamics: Their importance in multicultural counseling. In C. C. Lee & B.L. Richardson (Eds.), *Multicultural issues in counseling: New approaches to diversity.* Alexandria, VA: AACD Press.

Lee, J.B., Rotermund, M. & Bertschman, J. (1985). *Student aid and minority enrollment in higher education.* Washington, D.C.: Applied Systems, Inc.

Lind, J. D. (1982). Confusion, conflict—cooperation, *Improving College and University Teaching,* 30, 17-22.

Livingston, M.D. & Stewart, M. (1987). Minority students on a White campus: Perception is truth. *NASPA Journal,* 24, 39-49.

Lowman, R.P. & Spuck, D.W. (1975). Predictors of college success for the disadvantaged Mexican American. *Journal of College Student Personnel, 16,* 40-47.

Loo, C. M. & Rolison, G. (1986). Alienation of ethnic minority students at a predominately White university. *Journal of Higher Education,* 57, 58-77.

Lourenco, S.V. (1982, March). *Career awareness for health professions: Design of early outreach programs.* Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY.

Lynch, D. O. (1985, October). *Access, involvement, and excellence: A theoretical framework.* Paper presented at the University of Wisconsin System's Multicultural Conference, Oshkosh, WI.

Lyons, J.E. (1973). The adjustment of Black students to predominately White campuses. *Journal of Negro Education,* 42, 462-466.

McGhee, J.D. (1984). *Running the gauntlet: Black men in America.* New York: National Urban League.

Madrazo, R. & Rodriquez, M. (1978). Minority students perceptions of a university environment. *Journal of College Student Personnel,* 19, 259-263.

Magner, D.K. & Wilson, R. (1989, November). Many colleges report enrollments have increased; Some report progress in finding minority students. *Chronicle of Higher Education,* 36, pp 37-39.

Malcolm, A.H. (1985, October 20). New generation of poor youths emerges in the U.S. *New York Times,* pp 1, 56.

Manacker, J. (1972). *Articulation in urban areas: Community information networks and student articulation workers.*

Manning, W.H. (1978). The role of testing in affirmative action. Denver CO: Education Commission of the States.

Manning, W. H. (1989). The role of standardized testing in the admission of minority students. In W.E. Ward & M.M. Cross (Eds.). *Key issues in minority education. Research directions and practical implications.* Norman, OK: University of Oklahoma Center for Research on Minority Education.

Martinez-Trevino, R., Hastings, L.Y., Conley, A. & Acuna, E. (1984). The emerging use of student recruiters in admissions marketing. *Journal of College Admissions,* 102, 22-25.

Meacham, I. & Bachmann, G. (1988). *Presenting California State University admission requirements to tenth grade students: A pilot project.* California.

Messick, S. (1979). Potential uses of noncognitive measurement in education. *Journal of Educational Psychology, 71,* 281-292.

Mingle, J.R. and Rodriquez, E.M. (Eds.), (1990). *Building coalitions for minority success. A report of the SHEEO project on minority achievement in higher education.* Denver, CO: State Higher Education Executive Officers.

Miller, C. A. (1990). Minority student achievement: A comprehensive perspective. *Journal of Developmental Education, 13,* 6-8.

Miller, H.J. (1988). Minority vs. non-minority student retention programs at predominately White universities: A comparative analysis of their program structural components and design. *Western Journal of Black Studies, 12,* 86-91.

Miller, R. (1977). *Institutional characteristics affecting minority admissions and enrollment levels at state universities in Ohio, 1973-1976.* Oxford, OH: School of Education, Miami University.

Morton, C. N. (1982, October). *Higher education's response to the needs of minority students: Leadership and institutional issues.* Paper presented at the Annual Conference of the Society of Ethnic and special Studies, Edwardsville, IL

Myers, C. & Drevlow, S. (1982, March). *Summer bridge program: A dropout intervention program for minority and low-income students at the University of California, San Diego.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

Nakanishi, D.T. (1986). The untapped recruiters: Minority alumni and undergraduate admissions. *Journal of College Admission, 112,* 15-19.

National Association of College Admission Counselors (1989). Parents and counselors together program. A guide to presenting parent workshops that promote educational success with students. Alexandria, VA: National Association of College Admissions Counselors.

National Center for Education Statistics (1990). *Digest of education statistics 1990.* U.S. Department of Education. Washington, D.C.: U.S. Government Printing Office.

National Commission on Student Financial Assistance, (1983) Hearing Before the Subcommittee on Postsecondary Education of the Committee on Education and Labor. House of Representatives, Ninety-Eighth Congress, First Session. Washington, D.C.: U.S. Government Printing Office

National Institute of Independent Colleges and Universities (1991). *Independent Institutions in Partnership.* Washington, DC: National Institute of Independent Colleges and Universities.

National Institute of Independent Colleges and Universities (1991). *Independent Minority Colleges & Universtities.* Washington, DC: National Institute of Independent Colleges and Universities.

National Institute of Independent Colleges and Universities (1991). *Pluralism in the Professoriate.* Washington, DC: National Institute of Independent Colleges and Universities.

National Institute of Independent Colleges and Universities (1991). *Thank You for Asking.* Washington, DC: National Institute of Independent Colleges and Universities.

National Institute of Independent Colleges and Universities (1991). *Understanding Campus Climate.* Washington, DC: National Institute of Independent Colleges and Universities.

National Task Force for Minority Achievement in Higher Education (1990). *Achieving campus diversity. Policies for change.* Denver, CO: Education Commission of the States.

Nelson, R.B., Scott, T.B. & Bryan, W.A. (1984). Precollege characteristics and early college experiences as predictors of freshman year experience. *Journal of College Student Personnel, 25,* 50-54.

Nettles, M.E., Theony, A. & Gosman, E. (1985) *A comparative analysis of the predictors of Black and White students' academic achievement in college: A case for expanding admissions policies to include quality of the college experience.* Paper presented at the American Educational Research Association annual meeting.

New Jersey State Department of Higher Education (1988). *Increasing minority involvement.* Trenton, NJ: New Jersey State Department of Higher Education.

New York State Education Department (1989). *College admissions practices project.* Albany, NY: State University of New York.

Nickson, S.J. (1982, March). *Status of minority professionals on majority campuses. "Saviors, victims or survivors?"* Paper presented at the National Association for Equal Opportunity in Higher Education, Washington, D.C.

Nisbet, J. Ruble, V.E. & Schurr, K.T. (1982). Predictors of academic success with high risk college students. *Journal of College Student Personnel,* 23, 227-235.

Nobles, W. (1972), African philosophy: Foundations for a Black psychology. In R.L. Jones (Ed.), *Black psychology.* New York: Harper & Row.

Noel, L. (1978). *New directions for student services: reducing the dropout rate.* San Francisco: Jossey-Bass.

Novels, A.N. & Ender, S.C. (1988). The impact of developmental advising for high-achieving minority students. *NACADA Journal, 8,* 23-26.

O'Brien, E. M. (1989, January). 1988 ACE annual report sounds the alarm: Higher education community must act on the crisis of the Black male. *Black Issues in Higher Education,* 5, pp 3, 17.

O'Brien. E.M. (1989, February). Keep them coming back for more: Retention personnel help schools hold on to minority students. *Black Issues in Higher Education,* 5, pp 1, 3-5.

Ognibene, E. R. (1989). Integrating the curriculum: From impossible to possible. *College Teaching,* 37, 105-110.

Olivas, M.A. (1988). Latino faculty at the border. Increasing numbers key to more Hispanic access. *Change,* 20, 6-9.

Oliver, M. L., Rodriquez, C.J. & Mickelson, R.A. (1985). Brown, and Black in White: The social adjustment and academic performance of Chicano and Black students in a predominately White university. *The Urban Review,* 17, 3-23.

Oliver, J. & Etcheverry, R. (1987). Factors influencing the decisions of academically talented Black students to attend college. *Journal of Negro Education,* 56, 156-181.

Oliver, J. & Brown, L.B. (1988). College and university minority recruitment: Barriers, recruitment principles, and design guidelines. *Journal of College Student Development,* 29, 40-47.

Ostar, A. (1986). Declining federal role in education striking hard at college minority enrollment. *Black Issues in Higher Education, 3,* 8.

Oteri, L. & Manley, G.D. (1990). Racism on campus: The negative impact on enrollment. *College and University, 65*, 213-226.

Padilla, A.M. (1981). Pluralistic counseling and psychotherapy for Hispanic Americans. In A.J. Marsella & P.B. Pedersen (Eds.), *Cross-cultural counseling and psychotherapy*. New York: Pergamon Press.

Pascarella, E.T. & Chapman, D.W. (1983). A multi-institutional path analytic validation of Tinto's model of college withdrawal. *American Educational Research Journal*, 20, 87-102.

Pascarella, E.T., Duby, P.B. & Iverson, B.K. (1983). A test and reconceptualization of a theoretical model of college withdrawal in a commuter institution setting. *Sociology of Education*, 56, 88-100.

Patterson, A.M. & Sedlacek, W.E. (1979). *Differences among minority student backgrounds and attitudes toward a university and its services. Research report #18-79*. College Park: University of Maryland Counseling Center.

Patterson, A. M., Sedlacek, W.E. & Perry, F.W. (1984). Perceptions of Blacks and Hispanics in two campus environments. *Journal of College Student Personnel*, 25, 513-518.

Pentages, T.J. & Creedon, C. E. (19878). Studies of college attrition: 1950-1975. *Review of Educational Research, 48*, 49-101.

Perry, F. (1981). Factors affecting academic performance, and persistence among Mexican American, Black and Anglo students. *College Student Journal, 51*, 53-62.

Pollard, M. (1982). *Retention of minority students: A model program utilizing creative untapped resources*. Louisiana.

Pratt, L. (1980, April) *The use of noncognitive variables in predicting grade point averages of students in a predominately Black college*. Paper presented at the Annual Forum of the Association for Institutional Research, Atlanta, GA.

Preer, J.L. (1981). *Minority access to higher education: AAHE-ERIC/Higher Education research report 1*. Washington, D.C.: American Association for Higher Education and ERIC Clearinghouse on Higher Education.

Provencio, R.B. (1990). Opening doors: Three institutions strengthen their recruitment efforts to welcome Hispanic students. *Currents*, 16, 32-36.

Purnell, S. (1983). Quality and quantity issues in academic advising of minority students. In C. M. Chando (Ed.). *Beyond change: Managing the multifaceted role of the academic advisor. Proceedings of the National Conference on Academic Advising*. Pomona, NJ: National Academic Advising Association.

Ramirez, G. M. (1986). *Retention of the Latino university student: The case of CSULB*. Long Beach, CA: California State University.

Report of the Task Force on Education (1990). *Educating America: State strategies for achieving the national education goals*. Washington, D.C.: National Governor's Association.

Rhodes, F. H. T. (1987). *A neglected challenge: Minority participation in higher education. Occasional Paper No. Seventeen*. Washington, D.C.: Academy for Educational Development, Inc.

Richardson, E.H. (1981). Cultural and historical perspectives on counseling American Indians. In D.W. Sue (Ed.), *Counseling the culturally different: Theory and practice*. New York: John Wiley.

Richardson, R.C. (1989). *Institutional climate and minority achievement*. Denver, CO: Education Commission of the States.

Richardson, R.C. (1990). Achieving quality while maintaining diversity. *AGB Reports*, 32, 23.

Richardson, R., Simmons, H., & de los Santos, A. (1987). Graduating minority students. *Change*, 19, 20-27.

Richardson, R.C. & Skinner, E.F. (1991). *Achieving quality and diversity: Universities in a multicultural society*. New York, NY: ACE/McMillan.

Richmond, M. J. (1979). Strategies for recruiting minority students. *College Student Journal, 13*, 200-205.

Rock, D.A., Centra, J.A. & Linn, R.L. (1970). Relationships between college characteristics and student achievement. *American educational Research Journal*, 7, 109-21.

Rotherman, M.J. & Phinney, J.S. (1987). Introduction: Definitions and perspectives in the study of children's ethnic socialization. In J. S. Phinney and M. J. Rotherman (Eds.). *Children's ethnic socialization*. Beverly Hills, CA: Sage Publications.

Ruiz, R.A. (1981). Cultural and historical perspective in counseling Hispanics. In D.W. Sue (Ed.) *Counseling the culturally different: Theory and practice*. New York: Wiley.

Sabine, G. (1978). Encouraging minority enrollments: Five institutions' efforts. *Intellect, 106*, 329-332.

Sanchez, A.R. & King, M. (1986). Mexican Americans' use of counseling services: Cultural and institutional factors. *Journal of College Student Personnel*, 27, 344-349.

St. John, E.P. & Noell, J. (1989). The effects of student financial aid on access to higher education: An analysis of progress with special consideration of minority enrollment. *Research in Higher Education*, 30, 563-581.

Santa Cruz, R. M. (1982). Instructional satisfaction and the minority learner. *Performance and Instruction*, 21, 28-30.

Schantz, N. B. & Brown, P.Q. (1990). *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1978 through Fall 1988*. National Center of Education Statistics, U.S. Department of Education, Washington, D.C.: U.S. Government Printing Office.

Scher, M. (1979). A small college deals with student retention. *Journal of College Student Personnel*, 20, 176.
Sedlacek, W.E. (1977). Should higher education students be admitted differentially by race and sex: The evidence. *Journal of the National Association of College Admissions Counselors, 22*, 22-24.
Sedlacek, W.E. & Brooks, G.C. (1976). *Racism in American education*. Chicago, IL: Nelson-Hall, Inc.
Simpson, J.C. (1987, April). Black students are viewed as victims of subtle racism. *The Wall Street Journal*, pp.1, 23.
Stampen, J.O. & Fenske, R.H. (1988). The impact of financial aid on ethnic minorities. *The Review of Higher Education*, 11, 337-353.
Sue, D.W. (1978). Eliminating cultural oppression in counseling: Toward a general theory. *Journal of Counseling Psychology, 25*, 419-428.
Sue, D.W. (1990). *Counseling the culturally different: Theory and practice*. Second edition. New York: John Wiley & Sons.
Sue, S., & Sue, D. W. (1971). Chinese-American personality and mental health. *Amerasia Journal*, 1, 36-49.
Suen, H.K. (1983). Alienation and attrition of Black college students on a predominately White campus. *Journal of College Student Personnel*, 24, 117-12-.
Suhr, J. (1980). *Study of the 1978 Summer Step. The summer "Bridge" Program at the Learning Skills Center, University of California, Davis*. University of California at Davis. Office of Student Affairs Research and Information.
Sullivan, L.L. (1982). *Retention of minorities in higher Education: An abstracted bibliographic review (1978-1982). EXCEL Report*. University of Arkansas, Little Rock. Office of Instructional Development.
Tan, N. (1985). *The SEEK prefreshmen program at Baruch College, 1984: A follow-up study*. City University of New York, NY Bernard Baruch College of Compensatory Programs.
Tinsley, H. E. A., de St. Aubin, T.M. & Brown, M.T. (1982). College students' help-seeking preferences. *Journal of Counseling Psychology, 29*, 523-533.
Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*, 89-125.
Tracey, T.J. & Sedlacek, W.E. (1984). Noncognitive variables in predicting academic success by race. Measurement and Evaluation in Guidance, 16, 171-181.
Tracey, T.J. & Sedlacek, W.E. (1985). The relationship of noncognitive variables to academic success: A longitudinal comparison by race. *Journal of College Student Personnel, 26*, 405-410.
Trippi, J. & Cheatham, H.E. (1989). Effects of special counseling programs for Black freshmen on a predominately White campus. *Journal of College Student Development*, 30, 35-40.
U. S. Bureau of the Census (1985). *Current Population Reports*, Series P- 20, No. 404. Washington, D. C.: U. S. Government Printing Office.
U.S. Bureau of the Census (1986). *Current Population Reports*, Series P-20, No. 409. Washington, D.C.: U. S. Government Printing Office.
U.S. Department of Education (1980). *Digest of Education Statistics*. National Center for Education Statistics. Washington, D.C.: U. S. Government Printing Office. U.S. Department of Education (1988). Fall Enrollment in Colleges and Universities and Office of Civil Rights Compliance Reports. Washington, D.C.: U.S. Government Printing Office.
Van Arsdale, P.W., Sedlacek, W.E. & Brooks, G.C. (1970). *Differences in Black student perceptions of the communication structure in a predominately White university. Research Report #6-70*. College Park MD: University of Maryland Cultural study center.
Weiss, J.G. (1987). It's time to examine the examiners. *Negro Educational Review*, 38, 107-124.
Western Interstate Commission on Higher Education (1987). *From minority to majority*. Boulder CO.
White, T.J. & Sedlacek, W.E. (1986). Noncognitive predictors. *The Journal of College Admissions*, 111, 20-23.
Wiley, E. (1989, October 12). Scholars push for cultural diversity in curriculum. *Black Issues in Higher Education, 6*, pp 1, 10.
Willie, C.V. and McCord, A.S. (1972). *Black student at White colleges*. New York: Praeger Publishers.
Willingham, W.W. (1985). *Success in college: The role of personal qualities and academic abilities*. New York, NY: College Entrance Examination Board.
Wilson, R. & Carter, D. J.(1988). *Seventh Annual Status Report: Minorities in Higher Education*. Washington, D.C.: American Council on Education Office of Minority Concerns.
Wright, B. (1985). Programming success: Special student services and the American Indian college student. *Journal of American Indian Education*, 24, 1-7.
Zimmerman, W.S., Parks, H., Gray, K. and Michael, W.B. (1977). Validity of traditional cognitive measures and of the study attitudes and methods survey in the prediction of the academic success of Educational Opportunity Program students. *Educational and Psychological Measurement*, 37, 465-470.
Zita, J. (1988). From orthodoxy to pluralism: A postsecondary curricular reform. *Journal of Education*, 170, 58-76.
Zuniga, M.E. (1987). Mexican-American clinical training: A pilot project. *Journal of Social Work Education, 23*, 11-20.

NOTES